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STIC Search Report

EIC 1700

STIC Database Tracking Number: 105001

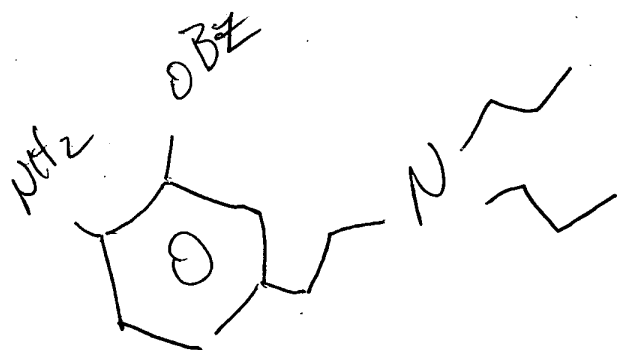
TO: John Hardee
Location: CP3 9B36
Art Unit : 1751
October 1, 2003

Case Serial Number: 10/052967

From: Kathleen Fuller
Location: EIC 1700
CP3/4 3D62
Phone: 308-4290

Kathleen.Fuller@uspto.gov

Search Notes



4,958,026

P28 NH₂

104 NH₂

107 NH₂

109 NH₂ US Pat

Source 115
118

UPC₂
NH₂
NH₂

EIC1700

Search Results

Feedback Form (Optional)



Scientific & Technical Information Center

The search results generated for your recent request are attached. If you have any questions or comments (compliments or complaints) about the scope or the results of the search, please contact *the EIC searcher* who conducted the search *or contact*:

Kathleen Fuller, Team Leader, 308-4290, CP3/4 3D62

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example:

➤ Relevant prior art found, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art not found:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Search results were not useful in determining patentability or understanding the invention.

Other Comments:

Drop off completed forms in CP3/4 - 3D62 .

=> FILE REG

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STRUCTURE FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2
DICTIONARY FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> FILE HCAPLUS

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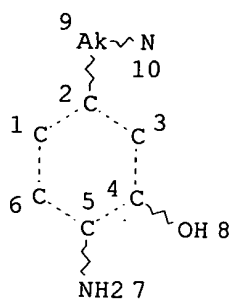
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FILE COVERS 1907 - 1 Oct 2003 VOL 139 ISS 14
FILE LAST UPDATED: 30 Sep 2003 (20030930/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> D QUE

L1 STR



100 structures from query

NODE ATTRIBUTES:

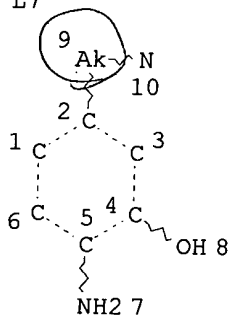
NSPEC IS RC AT 10
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L2 SCR 1838 AND 1993 AND 2004
 L3 SCR 403
 L4 SCR 1568
 L6 100 SEA FILE=REGISTRY SSS FUL L1 AND L2 AND L3 AND L4
 L7 STR



subset search
 the alkyl group can
 only be connected to the
 ring & to the nitrogen

NODE ATTRIBUTES:

NSPEC IS RC AT 10
CONNECT IS E2 RC AT 9
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L9 29 SEA FILE=REGISTRY SUB=L6 SSS FUL L7
 L10 41 SEA FILE=HCAPLUS ABB=ON L9
 L11 1 SEA FILE=HCAPLUS ABB=ON L10 AND (HAIR OR KERAT?)

=> D ALL L11 HITSTR

29 structures

41 CA references

1 CA reference on
 utility + 40
 CA references
 without utility

L11 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:574887 HCAPLUS
 DN 137:129539
 TI Primary intermediates for oxidative coloration of hair
 IN Lim, Mu-Ill; Pan, Yuh-Guo
 PA Clairol Incorporated, USA
 SO PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K007-13
 CC 62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|--|----------|-----------------|----------|
| PI | WO 2002058654 | A1 | 20020801 | WO 2002-US1533 | 20020118 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 2002144359 | A1 | 20021010 | US 2002-52967 | 20020118 |
| PRAI | US 2001-263588P | P | 20010123 | | |
| OS | MARPAT 137:129539 | | | | |
| AB | Primary intermediates for hair coloring compns. for oxidative dyeing of hair are 2-amino-5-aminomethylphenols. Hair dye compns. contained, e.g., 2-amino-5-phenylaminomethylphenol and 2-aminophenol. | | | | |
| ST | hair dye primary intermediate oxidn amino phenol | | | | |
| IT | Oxidizing agents (2-amino-5-aminomethylphenol primary intermediates for oxidative coloration of hair) | | | | |
| IT | Hair preparations (dyes; 2-amino-5-aminomethylphenol primary intermediates for oxidative coloration of hair) | | | | |
| IT | Amination (reductive; 2-amino-5-aminomethylphenol primary intermediates for oxidative coloration of hair) | | | | |
| IT | 90-15-3, 1-Naphthol 95-55-6, 2-Aminophenol 95-70-5, 2-Methylbenzene-1,4-diamine 95-88-5, 4-Chlorobenzene-1,3-diol 106-50-3, p-Phenylenediamine, biological studies 108-46-3, Resorcinol, biological studies 123-30-8, 4-Aminophenol 150-75-4, 4-Methylaminophenol 591-27-5, 3-Aminophenol 608-25-3, 2-Methylbenzene-1,3-diol 1004-74-6, Pyrimidinetetramine 2380-86-1, 1H-Indol-6-ol 2835-95-2, 5-Amino-2-methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6, 4-Amino-3-methylphenol 7469-77-4, 2-Methyl-1-naphthol 7575-35-1 16867-03-1, 2-Aminopyridin-3-ol 17672-22-9, 2-Amino-6-methylphenol 26021-57-8 41927-22-4, 4-Methyl-2-phenyl-2,4-dihydro-3H-pyrazol-3-one 53222-92-7, 3-Amino-2-methylphenol 55302-96-0, 5-(2-Hydroxyethylamino)-2-methylphenol 70643-19-5, 2-(2,4-Diaminophenoxy)ethanol 83763-47-7 93841-24-8, 2-(2,5-Diaminophenyl)ethanol 94082-77-6 129697-50-3 131311-66-5 155601-17-5 157469-54-0 220264-60-8 307493-94-3, 3-(2,4-Diaminophenoxy)-1-propanol 329320-36-7 444169-67-9 | | | | |

444169-68-0 444169-69-1 444169-70-4
444169-71-5 444169-72-6 444169-73-7
444169-74-8 444169-75-9

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(2-amino-5-aminomethylphenol primary intermediates for oxidative
coloration of hair)

IT 704-13-2, 3-Hydroxy-4-nitrobenzaldehyde

RL: RCT (Reactant); RACT (Reactant or reagent)
(2-amino-5-aminomethylphenol primary intermediates for oxidative
coloration of hair)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

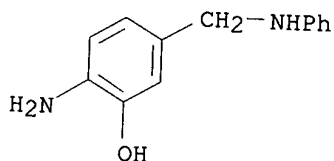
- (1) Hurley; WO 9940093 1999 HCAPLUS
- (2) Loev; Journal of Medicinal Chemistry 1985, V18(1), P24
- (3) Yamane; JP 6345282 1988

IT 444169-67-9 444169-68-0 444169-69-1
444169-70-4 444169-71-5 444169-72-6
444169-73-7 444169-74-8 444169-75-9

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(2-amino-5-aminomethylphenol primary intermediates for oxidative
coloration of hair)

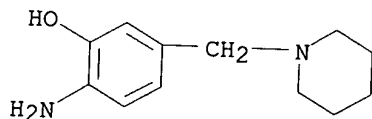
RN 444169-67-9 HCAPLUS

CN Phenol, 2-amino-5-[(phenylamino)methyl]- (9CI) (CA INDEX NAME)



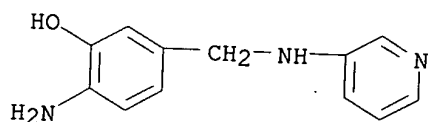
RN 444169-68-0 HCAPLUS

CN Phenol, 2-amino-5-[(1-piperidinyl)methyl]- (9CI) (CA INDEX NAME)



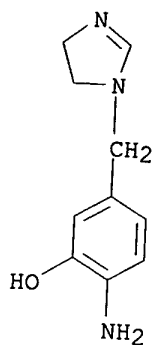
RN 444169-69-1 HCAPLUS

CN Phenol, 2-amino-5-[(3-pyridinylamino)methyl]- (9CI) (CA INDEX NAME)



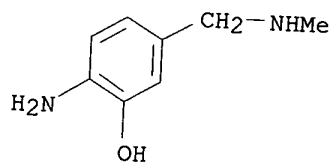
RN 444169-70-4 HCAPLUS

CN Phenol, 2-amino-5-[(4,5-dihydro-1H-imidazol-1-yl)methyl]- (9CI) (CA INDEX NAME)



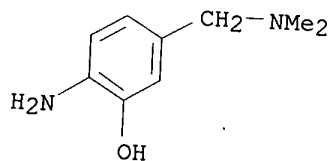
RN 444169-71-5 HCAPLUS

CN Phenol, 2-amino-5-[(methylamino)methyl]- (9CI) (CA INDEX NAME)



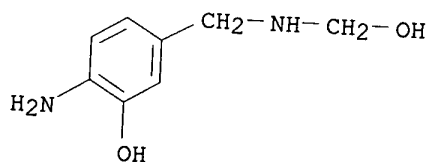
RN 444169-72-6 HCAPLUS

CN Phenol, 2-amino-5-[(dimethylamino)methyl]- (9CI) (CA INDEX NAME)



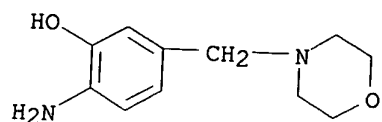
RN 444169-73-7 HCAPLUS

CN Phenol, 2-amino-5-[[(hydroxymethyl)amino]methyl]- (9CI) (CA INDEX NAME)

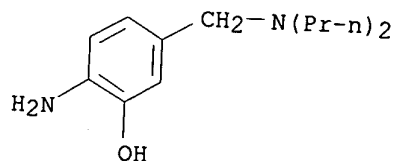


RN 444169-74-8 HCAPLUS

CN Phenol, 2-amino-5-(4-morpholinylmethyl)- (9CI) (CA INDEX NAME)

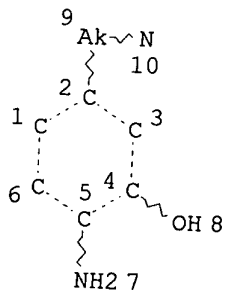


RN 444169-75-9 HCAPLUS
 CN Phenol, 2-amino-5-[(dipropylamino)methyl]- (9CI) (CA INDEX NAME)



=> S L10 NOT L9
 41 L9
 L12 0 L10 NOT L9

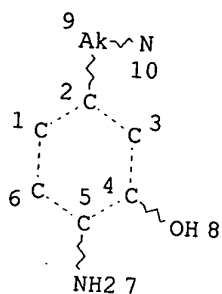
=> D QUE
 L1 STR



NODE ATTRIBUTES:
 NSPEC IS RC AT 10
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC I
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
 L2 SCR 1838 AND 1993 AND 2004
 L3 SCR 403
 L4 SCR 1568
 L6 100 SEA FILE=REGISTRY SSS FUL L1 AND L2 AND L3 AND L4
 L7 STR



NODE ATTRIBUTES:

NSPEC IS RC AT 10
 CONNECT IS E2 RC AT 9
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L9 29 SEA FILE=REGISTRY SUB=L6 SSS FUL L7
 L10 41 SEA FILE=HCAPLUS ABB=ON L9
 L11 1 SEA FILE=HCAPLUS ABB=ON L10 AND (HAIR OR KERAT?)
 L13 40 SEA FILE=HCAPLUS ABB=ON L10 NOT L11

=> D L13 ALL 1-40 HITSTR

*40 CA references from
 the structures with no
 utility specified*

L13 ANSWER 1 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2003:232918 HCAPLUS
 DN 138:382900
 TI Structure and function of neuromelanin
 AU Ito, Shosuke; Wakamatsu, Kazumasa; Zecca, Luigi
 CS Fujita Health University School of Health Sciences, Toyoake, Aichi,
 470-1192, Japan
 SO Advances in Behavioral Biology (2002), 53(Catecholamine Research), 269-272
 CODEN: ADBBBW; ISSN: 0099-6246
 PB Plenum Publishing Corp.
 DT Journal; General Review
 LA English
 CC 14-0 (Mammalian Pathological Biochemistry)
 Section cross-reference(s): 2, 6
 AB A review. Thiazole-2,4,5-tricarboxylic acid to pyrrole-2,3-dicarboxylic
 acid (PDCA) ratio and the 4-aminohydroxyphenylethylamine to PDCA ratio
 were used to chem. characterized neuromelanin isolated from human
 substance nigra. Melanin moiety of neuromelanin consist mostly of
 dopamine-derived units with 10-20% incorporation of cysteinyl dopamine-
 derived units. Content of melanin in substantia nigra was approx. 180
 .mu.g/g wet wt. on the basis of the content of isolated neuromelanin.
 Compared to dopamine-melanin, dopamine was only five-fold more toxic to
 mice cerebellar granular cells and PC12 cells suggesting that
 neuromelanin, rather than dopamine itself, plays a major role in the
 degeneration of nigral cells.
 ST review neuromelanin substantia nigra dopamine parkinsonism

IT Nerve, disease
(degeneration; structure and function of neuromelanin from brain and its chem. degrdn. products)

IT Melanins
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(neuromelanins; structure and function of neuromelanin from brain and its chem. degrdn. products)

IT Human
Parkinson's disease
(structure and function of neuromelanin from brain and its chem. degrdn. products)

IT Melanins
RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(structure and function of neuromelanin from brain and its chem. degrdn. products)

IT Brain
(substantia nigra; structure and function of neuromelanin from brain and its chem. degrdn. products)

IT 51-61-6, Dopamine, biological studies
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(structure and function of neuromelanin from brain and its chem. degrdn. products)

IT 52-90-4, L-Cysteine, biological studies
RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(structure and function of neuromelanin from brain and its chem. degrdn. products)

IT 945-32-4P, Pyrrole-2,3,5-tricarboxylic acid 1125-32-2P, Pyrrole-2,3-dicarboxylic acid 22358-80-1P, Thiazole-4,5-dicarboxylic acid **104083-77-4P** 290294-61-0P, Thiazoletricarboxylic acid
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(structure and function of neuromelanin from brain and its chem. degrdn. products)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

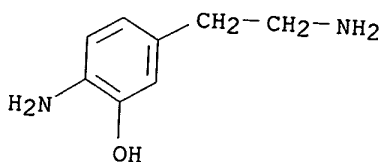
RE

(1) Carstam, R; Biochim Biophys Acta 1991, V1097, P152 HCAPLUS
(2) D'Ischia, M; Pigment Cell Res 1997, V10, P370 HCAPLUS
(3) Fornstedt, B; J Neural Transm (P-D Sect) 1989, V1, P279 MEDLINE
(4) Ito, S; Pigment Cell Res 1998, V11, P120 HCAPLUS
(5) Ito, S; Pigment Cell Res 2000, Suppl 8, P103
(6) Odh, G; J Neurochem 1994, V62, P2030 HCAPLUS
(7) Offen, D; Neurosci Lett 1999, V260, P101 HCAPLUS
(8) Rosengren, E; J Neural Transm 1985, V63, P247 HCAPLUS
(9) Wakamatsu, K; Neurosci Lett 1991, V131, P57 HCAPLUS
(10) Zecca, L; J Neurochem 2000, V74, P1758 HCAPLUS

IT **104083-77-4P**
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(structure and function of neuromelanin from brain and its chem. degrdn. products)

RN 104083-77-4 HCAPLUS

CN Phenol, 2-amino-5-(2-aminoethyl)- (9CI) (CA INDEX NAME)



- L13 ANSWER 2 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2003:57478 HCAPLUS
 DN 139:6651
 TI Direct preparation of polyfunctional amino-substituted arylmagnesium reagents via an iodine-magnesium exchange reaction
 AU Varchi, Greta; Kofink, Christiane; Lindsay, David M.; Ricci, Alfredo;
 CS Research Area of Bologna (CNR-ISOF), National Research Council, Bologna, 40129, Italy
 SO Chemical Communications (Cambridge, United Kingdom) (2003), (3), 396-397
 CODEN: CHCOFS; ISSN: 1359-7345
 PB Royal Society of Chemistry
 DT Journal
 LA English
 CC 25-20 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 AB The successive addn. of PhMgCl and i-PrMgCl to functionalized iodoanilines allows their conversion to the corresponding amino-functionalized Grignard reagents, which react smoothly with a range of electrophiles in high yield.
 ST iodoaniline Grignard reaction substitution electrophile; iodine magnesium
 IT exchange benzoate benzonitrile deriv prep
 IT Substitution reaction, electrophilic
 (Grignard reaction of iodoanilines and subsequent substitution by electrophiles)
 IT Grignard reaction
 (of iodoanilines and subsequent substitution by electrophiles)
 IT 100-52-7, Benzaldehyde, reactions 104-55-2, Cinnamaldehyde 106-95-6, Allyl bromide, reactions 106-96-7, Propargyl bromide 623-47-2, Ethyl propiolate 1070-66-2, 2-Butylacrolein 2043-61-0, Cyclohexanecarboxaldehyde 5400-81-7 22737-37-7, N,O-Bis(trimethylsilyl)hydroxylamine 33348-34-4 469911-86-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (Grignard reaction of iodoanilines and subsequent substitution by electrophiles)
 IT 100-59-4, Phenylmagnesium chloride 1068-55-9, Isopropylmagnesium chloride
 RL: RGT (Reagent); RACT (Reactant or reagent)
 (Grignard reaction of iodoanilines and subsequent substitution by electrophiles)
 IT 55586-26-0P 534582-49-5P 534582-51-9P 534582-53-1P
 534582-54-2P 534582-55-3P 534582-56-4P 534582-57-5P 534582-58-6P
 534582-60-0P 534582-61-1P 534582-62-2P 534582-63-3P 534582-64-4P
 534582-65-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (Grignard reaction of iodoanilines and subsequent substitution by electrophiles)
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Alberti, A; J Org Chem 1996, V61, P1677 HCAPLUS

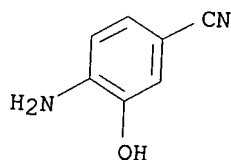
- (2) Boudier, A; Angew Chem, Int Ed 2000, V39, P4414
- (3) Boymond, L; Angew Chem, Int Ed 1998, V37, P1701 HCAPLUS
- (4) Casarini, A; J Org Chem 1993, V58, P5620 HCAPLUS
- (5) Dembach, P; Chem-Eur J 2000, V6, P1281
- (6) Herrinton, P; Org Proc Res Dev 2001, V5, P80 HCAPLUS
- (7) Jensen, A; Synthesis 2002, P565 HCAPLUS
- (8) Knight, F; Tetrahedron 1997, V53, P11411 HCAPLUS
- (9) Knochel, P; J Org Chem 1988, V53, P2390 HCAPLUS
- (10) Nicolaou, K; Angew Chem, Int Ed 1998, V37, P2717 HCAPLUS
- (11) Okubo, M; Bull Chem Soc Jpn 1980, V53, P281 HCAPLUS
- (12) Rottlander, M; Chem-Eur J 2000, V6, P767 HCAPLUS
- (13) Sapountzis, I; Angew Chem, Int Ed 2002, V41, P1610 HCAPLUS
- (14) Varchi, G; Synlett 2001, P477 HCAPLUS

IT 55586-26-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(Grignard reaction of iodoanilines and subsequent substitution by electrophiles)

RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



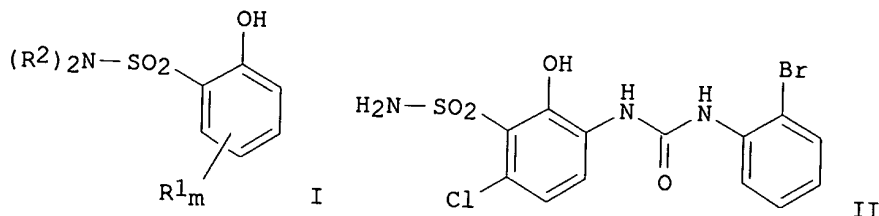
L13 ANSWER 3 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:777862 HCAPLUS
DN 137:294765
TI Preparation of 2-sulfamoylphenols as IL-8 inhibitors with increased metabolic stability
IN Palovich, Michael R.; Widdowson, Katherine L.
PA Smithkline Beecham Corporation, USA
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07C
CC 25-13 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002079122 | A2 | 20021010 | | |
| WO 2002079122 | A3 | 20021128 | WO 2002-US10038 | 20020327 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,

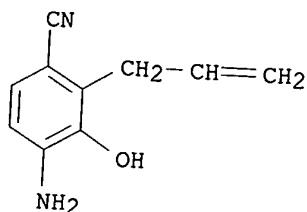
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 PRAI US 2001-280411P P 20010330
 OS MARPAT 137:294765
 GI



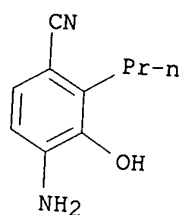
- AB Ortho sulfonamide substituted phenols I [wherein R1 = independently H, halo, NO2, CN, (halo)alkyl, alkenyl, (halo)alkoxy, azido, aryl(alkyl), arylalkenyl, aryl(alk)oxy, heterocyclyl(alkyl), heterocyclylalkoxy, heterocyclylalkenyl, or (un)substituted R4SOO-2(alkyl), (thio)ureido, carbamoyl(alkyl), carboxy(alkyl), sulfamoyl(alkyl), etc.; or (R1)2 = (un)substituted O(CH2)1-30 or 5-6 membered ring; R2 = independently H, OH, or (un)substituted OR3, alkyl, aryl(alkyl), arylalkenyl, cycloalkyl(alkyl), heteroaryl(alkyl), heteroarylalkenyl, heterocyclyl(alkyl), or heterocyclylalkenyl; R3 = (un)substituted alkyl, aryl(alkyl), heteroaryl(alkyl), heterocyclyl(alkyl), or carboxy; R4 = H or (un)substituted alkyl, aryl(alkyl), heteroaryl(alkyl), or heterocyclyl(alkyl); m = 0-4] and phenols substituted with other functional groups in the ortho position were prep'd. as IL-8 inhibitors and tested for metabolic stability. For example, 3-amino-6-chloro-2-hydroxybenzenesulfonamide (6-step prepn. given) was condensed with 2-bromophenylisocyanate in DMF to give the urea II (41%). Sulfonamide II displayed increased half-life (10.6 h vs. 0.09-0.19 h) and reduced clearance (4.6 mL/min/kg vs. 26-72 mL/min/kg) in rats compared to compds. having another functional group ortho to the phenol. In glucuronidation studies, phenols with ortho sulfonamides and ortho sulfones displayed reduced clearance (<0.6 mL/min/g vs. 2.4-15.4 mL/min/g) in human microsomes compared to the corresponding amide, sulfoxide, and alkyl substituted compds. Thus, phenols contg. an ortho sulfone or sulfonamide substituent have increased metabolic stability and/or half-life.
- ST sulfonamide sulfone phenol prepn increased metabolic stability;
 sulfamoylhydroxyphenyl halophenyl urea prepn increased half life
- IT Sulfonamides
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (arenesulfonamides; prepn. of ortho sulfonamide and ortho sulfone phenols as IL-8 inhibitors with increased metabolic stability)
- IT Sulfones
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (aryl; prepn. of ortho sulfonamide and ortho sulfone phenols as IL-8 inhibitors with increased metabolic stability)
- IT Drug metabolism
 (prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)
- IT Interleukin 8 receptors

- RL: BSU (Biological study, unclassified); BIOL (Biological study) (prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)
- IT Phenols, preparation
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)
- IT Human
(prepn. of ortho sulfonamide and ortho sulfone phenols as IL-8 inhibitors with increased metabolic stability)
- IT Aromatic compounds
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (sulfonamides; prepn. of ortho sulfonamide and ortho sulfone phenols as IL-8 inhibitors with increased metabolic stability)
- IT Aromatic compounds
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (sulfones; prepn. of ortho sulfonamide and ortho sulfone phenols as IL-8 inhibitors with increased metabolic stability)
- IT 468064-33-7P, 1-(2-Bromophenyl)-3-(4-cyano-2-hydroxy-3-propylphenyl)urea
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (intermediate; prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)
- IT 6579-54-0P, 2,6-Dichlorobenzenesulfonyl chloride 10290-98-9P, 2,6-Dichlorobenzenesulfonamide 89281-19-6P, 2,6-Dichloro-3-nitrobenzenesulfonamide 203190-56-1P, 2-Allyloxy-4-cyanonitrobenzene 203190-57-2P, 2-Allyloxy-4-cyanoaniline 203201-41-6P, 4-Cyano-2-hydroxy-3-(2-propenyl)aniline 203201-42-7P, 4-Cyano-2-hydroxy-3-propylaniline 276702-19-3P, 6-Chloro-2-hydroxy-3-nitrobenzenesulfonamide 276702-20-6P, 3-Amino-6-chloro-2-hydroxybenzenesulfonamide 276702-24-0P, N,N-Dimethyl-6-chloro-2-hydroxy-3-nitrobenzenesulfonamide 276702-25-1P, N,N-Dimethyl-3-amino-6-chloro-2-hydroxybenzenesulfonamide 276702-27-3P, N-Methyl-6-chloro-2-hydroxy-3-nitrobenzenesulfonamide 276702-28-4P, N-Methyl-3-amino-6-chloro-2-hydroxybenzenesulfonamide 468064-28-0P, 2-Acetyl-6-chloro-3-nitrobenzenesulfonamide 468064-29-1P, N-Methyl-2-acetyl-6-chloro-3-phenylbenzamide 468064-43-9P, 6-Chloro-2-hydroxy-3-nitro-N-phenylbenzamide 468064-44-0P, 3-Amino-6-chloro-2-hydroxy-N-phenylbenzamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)
- IT 276702-15-9P, N-(4-Chloro-2-hydroxy-3-aminosulfonylphenyl)-N'-(2,3-dichlorophenyl)urea
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)

- IT 276700-41-5P, N-(4-Chloro-2-hydroxy-3-aminosulfonylphenyl)-N'-(2,3-dichlorophenyl)urea sodium salt 276700-44-8P, N-[4-Chloro-3-(N'',N''-dimethylaminosulfonyl)-2-hydroxyphenyl]-N'-(2,3-dichlorophenyl)urea 276700-45-9P, N-(2-Bromophenyl)-N'-[4-chloro-3-(N'',N''-dimethylaminosulfonyl)-2-hydroxyphenyl]urea 276700-46-0P, N-[4-Chloro-2-hydroxy-3-(methylaminosulfonyl)phenyl]-N'-(2,3-dichlorophenyl)urea 276700-47-1P, N-(2-Bromophenyl)-N'-[4-chloro-2-hydroxy-3-(methylaminosulfonyl)phenyl]urea 276702-14-8P, N-(2-Bromophenyl)-N'-(4-chloro-2-hydroxy-3-aminosulfonylphenyl)urea 276702-16-0P, N-[4-Chloro-2-hydroxy-3-[(2-methoxyethyl)aminosulfonyl]phenyl]-N'-(2,3-dichlorophenyl)urea 378248-11-4P, 3-(2-Hydroxy-4-nitrophenylamino)-4-phenylaminocyclobut-3-ene-1,2-dione 378248-12-5P, 4-[(3,4-Dioxo-2-phenylaminocyclobut-1-enyl)amino]-3-hydroxybenzonitrile 378248-14-7P, 6-Chloro-3-[(3,4-dioxo-2-phenylaminocyclobut-1-enyl)amino]-2-hydroxybenzenesulfonamide 468064-30-4P, N-[4-Chloro-2-hydroxy-3-[(2-methoxyethyl)sulfonyl]phenyl]-N'-(2,3-dichlorophenyl)urea 468064-31-5P, 1-(4-Chloro-2-hydroxy-3-methanesulfonylphenyl)-3-(2,3-dichlorophenyl)urea 468064-32-6P, 1-(2-Bromophenyl)-3-(4-cyano-2-hydroxy-3-methanesulfonylphenyl)urea 468064-34-8P, 1-(2-Bromophenyl)-3-[4-cyano-2-hydroxy-3-(1-methylpropyl)phenyl]urea 468064-35-9P, 1-(2-Bromophenyl)-3-[4-cyano-2-hydroxy-3-(1-methylbutyl)phenyl]urea 468064-36-0P, 1-(2-Bromophenyl)-3-(4-cyano-2-hydroxy-3-isobutylphenyl)urea 468064-37-1P, 1-(3-Bromo-4-cyano-2-hydroxyphenyl)-3-(2-bromophenyl)urea 468064-38-2P, 1-(4-Chloro-2-hydroxy-3-methanesulfinylphenyl)-3-(2,3-dichlorophenyl)urea 468064-39-3P, [6-Chloro-3-[3-(2,3-dichlorophenyl)ureido]-2-hydroxyphenyl]methanesulfonamide 468064-40-6P, 3-[3-(2-Bromophenyl)ureido]-6-chloro-2-hydroxybenzamide 468064-41-7P, 6-Chloro-3-[3-(2,3-dichlorophenyl)ureido]-2-hydroxy-N-phenylbenzamide 468064-45-1P, 1-[4-Chloro-2-hydroxy-3-(morpholin-4-ylmethanoyl)phenyl]-3-(2,3-dichlorophenyl)urea 468064-46-2P, 3-[(3,4-Dioxo-2-phenylaminocyclobut-1-enyl)amino]-2-hydroxybenzonitrile 468064-48-4P, 3-(3-Fluoro-2-hydroxyphenylamino)-4-phenylaminocyclobut-3-ene-1,2-dione
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)
IT 468064-50-8 468064-51-9 468064-52-0
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)
IT 62-53-3, Aniline, reactions 1592-00-3, 2-Bromophenyl isocyanate 18495-15-3, 2-Nitro-5-cyanophenol 24966-39-0, 2,6-Dichlorobenzenethiol 41195-90-8, 2,3-Dichlorophenyl isocyanate 42132-09-2, 3-Anilino-4-ethoxy-1,2-cyclobut-3-enedione 55775-97-8, 2,6-Dichloro-3-nitrobenzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)
IT 203201-41-6P, 4-Cyano-2-hydroxy-3-(2-propenyl)aniline 203201-42-7P, 4-Cyano-2-hydroxy-3-propylaniline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. and metabolic studies of ortho substituted phenols as IL-8 inhibitors)
RN 203201-41-6 HCAPLUS
CN Benzonitrile, 4-amino-3-hydroxy-2-(2-propenyl)- (9CI) (CA INDEX NAME)



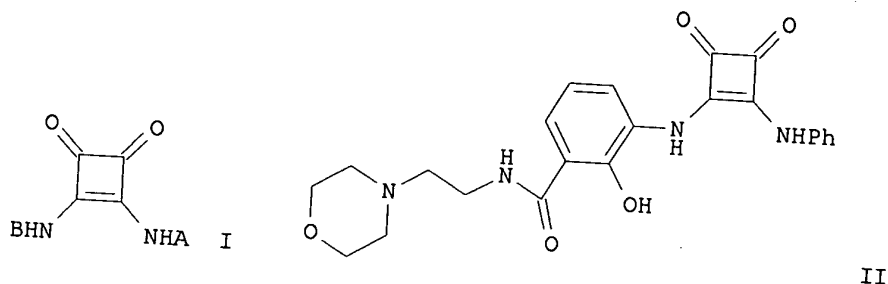
RN 203201-42-7 HCAPLUS
 CN Benzonitrile, 4-amino-3-hydroxy-2-propyl- (9CI) (CA INDEX NAME)



L13 ANSWER 4 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:754340 HCAPLUS
 DN 137:279205
 TI Preparation of 3,4-diaminocyclobutene-1,2-diones as CXC chemokine receptor antagonists
 IN Taveras, Arthur G.; Aki, Cynthia J.; Bond, Richard W.; Chao, Jianping; Dwyer, Michael; Ferreira, Johan A.; Pachter, Jonathan; Baldwin, John J.; Kaiser, Bernd; Li, Ge; Merritt, J. Robert; Nelson, Kingsley H., Jr.; Rokosz, Laura L.
 PA Schering Corporation, USA; Pharmacopeia, Inc.
 SO PCT Int. Appl., 113 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07C225-20
 ICS C07C229-42; C07C229-64; C07C237-36; C07C237-44; C07C255-58; C07C255-59; C07C271-20; C07C311-08; C07C311-21; C07D205-04; C07D207-08; C07D207-16; C07D211-60; C07D213-89; C07D231-38; C07D235-06; C07D239-42; C07D249-18; C07D277-28
 CC 28-13 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1, 25, 27
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2002076926 | A1 | 20021003 | WO 2002-US2888 | 20020201 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 US 2003097004 A1 20030522 US 2002-62006 20020201
 PRAI US 2001-265951P P 20010202
 OS MARPAT 137:279205
 GI



- AB Title compds. I; [A = (substituted) aryl, heteroaryl; B = (substituted) Ph, benzotriazolyl, benzimidazolyl, hydroxyimidazolyl, hydroxythienyl, hydroxypyrrolyl, etc.], were prepd. Thus, 1-ethoxy-2-phenylamino-1-cyclobutene-3,4-dione (prepn. given) and 2-OH-3-[2-(morpholinoethyl)aminocarbonyl]aniline (prepn. given) were refluxed overnight in EtOH to give 34% title compd. (II). I showed CXCR2 receptor binding activity in the range of 1-10000 nM.
- ST aminobutenedione prepn CXC chemokine receptor antagonist; butenedione arylamino prepn CXC chemokine receptor antagonist; psoriasis atopic dermatitis asthma arthritis cancer treatment diaminobutenedione
- IT Chemokine receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (CXCR1, antagonists; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Chemokine receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (CXCR2, antagonists; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Intestine, disease
 (Crohn's, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Sarcoma
 (Kaposi's, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Respiratory distress syndrome
 (acute, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Transplant rejection
 (allotransplant, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Antiarteriosclerotics
 (antiatherosclerotics; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Dermatitis
 (atopic, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)

- IT Stomach, neoplasm
(carcinoma, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Lung, disease
(chronic obstructive, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Interleukin 12
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coadministration; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Eye, disease
(diabetic retinopathy, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Gingiva, disease
(gingivitis, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Kidney, disease
(glomerulonephritis, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Transplant and Transplantation
(graft-vs.-host reaction, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Allergy
(hypersensitivity, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Hepatitis virus
Human herpesvirus
(infection treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Intestine, disease
(inflammatory, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Reperfusion
(injury, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Brain, disease
- Heart, disease
(ischemia, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Eye, disease
(macula, degeneration, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Lung, neoplasm
(non-small-cell carcinoma, treatment; prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Anti-AIDS agents
- Anti-Alzheimer's agents
- Antiarthritics
- Antiasthmatics
- Anticoagulants
- Antimalarials
- Antitumor agents
- Antiviral agents
- Human
- Solid phase synthesis
(prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Chemokines

- RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Eye, disease
(retinopathy, treatment; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Shock (circulatory collapse)
(septic, treatment; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Brain, disease
(stroke, treatment; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Shock (circulatory collapse)
(toxic shock syndrome, treatment; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Sepsis
(treatment of gram neg. sepsis; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT AIDS (disease)
Alzheimer's disease
Arthritis
Asthma
Atherosclerosis
Eye, disease
Malaria
Melanoma
Neoplasm
Psoriasis
Thrombosis
(treatment; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Intestine, disease
(ulcerative colitis, treatment; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Interleukin 8 receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha., antagonists; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha., coadministration; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT Interleukin 8 receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.beta., antagonists; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)
- IT 50-35-1, Thalidomide 145-63-1, Suramin 15866-90-7, Col-3 33069-62-4,
Taxol 37270-94-3, Platelet factor 4 38101-59-6, Im862 86090-08-6,
Angiostatin 99519-84-3, CAI 114977-28-5, Taxotere 129298-91-5,
Tnp-470 148717-90-2, Squalamine 154039-60-8, Marimastat 169799-04-6,
Cgs27023a 187888-07-9, Endostatin 188968-51-6, Emdl21974
192329-42-3, Ag3340 204005-46-9, Su-5416 212142-18-2, PTK 787
216974-75-3, 252916-29-3, Su-6668 259188-38-0, Bms-275291
305838-77-1, Neovastat 324740-00-3, Vitaxin 386211-13-8, Zd-101
443913-73-3, Zd-6474
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coadministration; prep. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)

IT 52951-27-6P 378248-11-4P 378248-12-5P 464911-76-0P 464911-77-1P
464911-78-2P 464911-79-3P 464911-80-6P 464911-81-7P 464911-82-8P
464911-83-9P 464911-84-0P 464911-85-1P 464911-86-2P 464911-87-3P
464911-88-4P 464911-89-5P 464911-90-8P 464911-91-9P 464911-92-0P
464911-93-1P 464911-94-2P 464911-95-3P 464911-96-4P 464911-97-5P
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464912-73-0P 464912-74-1P 464912-75-2P 464912-76-3P 464912-77-4P
464912-78-5P 464912-79-6P 464912-80-9P 464912-81-0P 464912-82-1P
464912-83-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor
antagonists)

IT 62-53-3, Benzenamine, reactions 64-04-0, Benzeneethanamine 74-89-5,
Methanamine, reactions 75-04-7, Ethanamine, reactions 85-38-1
87-62-7 88-75-5 90-41-5, [1,1'-Biphenyl]-2-amine 94-70-2 95-54-5,
1,2-Benzenediamine, reactions 95-55-6 96-50-4, 2-Thiazolamine
100-01-6, reactions 100-46-9, Benzenemethanamine, reactions 102-28-3
106-93-4 107-85-7 107-99-3 108-00-9 108-91-8, Cyclohexanamine,
reactions 109-55-7 109-69-3 110-89-4, Piperidine, reactions
110-91-8, Morpholine, reactions 121-88-0 121-92-6 123-00-2,
4-Morpholinepropanamine 123-30-8 123-75-1, Pyrrolidine, reactions
124-40-3, reactions 124-68-5 142-25-6 303-38-8 372-19-0 372-39-4
462-08-8, 3-Pyridinamine 503-29-7, Azetidine 504-29-0, 2-Pyridinamine
536-90-3 540-54-5 552-89-6 570-23-0 582-33-2 587-02-0 591-27-5
606-22-4 615-36-1 619-14-7 626-43-7 643-28-7 645-36-3
873-74-5 931-16-8 2038-03-1, 4-Morpholineethanamine 2133-40-6
2217-41-6 2374-03-0 2491-20-5 2799-16-8 2799-17-9 2835-98-5
2892-51-5 3218-02-8, Cyclohexanemethanamine 3694-52-8 3958-60-9
4403-69-4 5231-87-8 5344-90-1 5680-79-5 14268-66-7,
1,3-Benzodioxol-5-amine 14338-36-4 14543-43-2 17467-15-1
17720-99-9, 4-Thiazolamine 18638-99-8 23356-96-9 28059-64-5
32559-18-5 **55586-26-0** 57260-71-6 63435-16-5 68832-13-3
77648-20-5 108267-20-5 112245-13-3 464913-93-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor
antagonists)

IT 608-32-2P, 1,2,3-Benzenetriamine 1202-00-2P 1214-44-4P 1668-84-4P,
1,3-Benzodioxol-4-amine 1904-62-7P 4331-29-7P, 1H-Benzimidazol-4-amine
4469-81-2P 5768-39-8P, 1,3-Benzodioxole-4-carboxylic acid 6299-39-4P
18076-61-4P, 1H-Benzotriazol-4-amine 18800-37-8P 20938-64-1P
29026-74-2P 34801-09-7P 35748-34-6P 37073-18-0P 38177-30-9P
42132-07-0P 42132-09-2P 43200-31-3P 51736-38-0P 55581-64-1P

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| 97962-70-4P | 105337-21-1P | 110545-67-0P | 110545-68-1P | 111081-10-8P |
| 146224-62-6P | 162046-50-6P | 182500-29-4P | 194413-46-2P | 301527-63-9P |
| 416876-80-7P | 464912-84-3P | 464912-85-4P | 464912-86-5P | 464912-87-6P |
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| 464913-91-5P | 464913-92-6P | 464913-94-8P | | |

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Beatrix, S; WO 0035864 A 2000 HCAPLUS
- (2) Bi, G; WO 0192202 A 2001 HCAPLUS
- (3) Chen, Y; HECHENG HUAXUE 1998, V6(4), P383 HCAPLUS
- (4) Chen, Y; SICHUAN DAXUE XUEBAO, ZIRAN KEXUEBAN 1996, V33(2), P182 HCAPLUS
- (5) Ehrhardt, H; CHEMISCHE BERICHTE 1977, V110(7), P2506 HCAPLUS
- (6) Grunefeld, J; ARCHIV DER PHARMAZIE 1985, V318(12), P1062
- (7) Huels Chemische Werke Ag; FR 1531943 A 1968 HCAPLUS
- (8) Huels Chemische Werke Ag; DE 2638855 A 1978 HCAPLUS
- (9) Maahs, G; ANGEWANDTE CHEMIE 1966, V78(20), P927 HCAPLUS
- (10) Neurosearch AS; WO 0020378 A 2000 HCAPLUS
- (11) Neuse, E; POLYMER 1974, V15(1), P339
- (12) Palovich, M; WO 0164208 A 2001 HCAPLUS

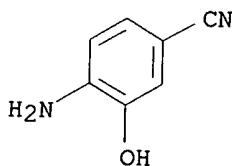
IT 55586-26-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of 3,4-diaminobutene-1,2-diones as CXC chemokine receptor antagonists)

RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 5 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:539534 HCAPLUS

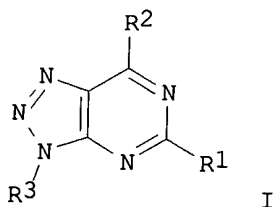
DN 137:109285

TI Preparation of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists

IN Gillespie, Roger John; Lerpiniere, Joanne; Gaur, Suneel; Bamford, Samantha

Jayne; Stratton, Gemma Caroline; Leonardi, Stefania; Weiss, Scott Murray
 PA Vernalis Research Limited, UK
 SO PCT Int. Appl., 157 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-505
 ICS C07D487-04; A61P025-28
 CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | WO 2002055083 | A1 | 20020718 | WO 2002-GB91 | 20020110 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| PRAI | GB 2001-624 | A | 20010110 | | |
| OS | MARPAT 137:109285 | | | | |
| GI | | | | | |



- AB The title compds. [I; R1 = H, alkyl, aryl, etc.; R2 = aryl attached via an unsatd. carbon; R3 = H, alkyl, COR5, CO2R7, CONR5R6, CONR4NR5R6, SO2R7; R4-R6 = H, alkyl, aryl; or NR5R6 = heterocyclyl; or where R4-R6 are in a CONR4NR5R6 group, R4 and R5 may be linked to form a heterocyclic group; R7 = alkyl, aryl], useful in the treatment or prevention of a disorder in which the blocking of purine receptors, particularly adenosine receptors and more particularly A2A receptors, may be beneficial, particularly wherein said disorder is a movement disorder such as Parkinson's disease or depression, cognitive or memory impairment, acute or chronic pain, ADHD or narcolepsy, or for neuroprotection, were prepd. Thus, reacting 7-(2-furyl)-1H-[1,2,3]triazolo[4,5-d]pyrimidine-5-amine (prepn. given) with 2-fluorobenzyl bromide in the presence of NaH in DMF afforded 22% I [R1 = NH2; R2 = 2-furyl; R3 = 2-FC6H4CH2] which showed Ki of 3 nM against A2A receptor binding.
- ST triazolopyrimidine prepn purinoceptor antagonist adenosine A2A receptor Parkinsonism; neuroprotectant triazolopyrimidine prepn; cognition enhancer triazolopyrimidine prepn; antidepressant triazolopyrimidine prepn; analgesic triazolopyrimidine prepn; Alzheimer's disease triazolopyrimidine prepn

- IT Adenosine receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (A2A; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Nervous system, disease
 - (Huntington's chorea; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Disease, animal
 - (atrophy, progressive pallidal atrophy; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Mental disorder
 - (attention deficit hyperactivity disorder; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Brain
 - (basal ganglia, treatment of disorders of; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Movement disorders
 - (cerebral palsy, progressive supernuclear palsy; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Mental disorder
 - (cognitive; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Mental disorder
 - (depression; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Cognition
 - (disorder; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Nervous system, disease
 - (dystonia, Dopa-responsive dystonia-Parkinsonism; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Nervous system, disease
 - (multiple system atrophy; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Sleep
 - (narcolepsy; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Cytoprotective agents
 - (neuroprotectants; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Alzheimer's disease
 - Analgesics
 - Anti-Alzheimer's agents
 - Antidepressants
 - Antiparkinsonian agents
 - Cognition enhancers
 - Human
 - Nervous system agents
 - Pain
 - Parkinson's disease
 - Purinoceptor antagonists
 - Wilson's disease
 - (prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT Nervous system, disease
 - (spasticity; prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor antagonists)
- IT 59-92-7, L-Dopa, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in combination with; prepn. of triazolo[4,5-d]pyrimidines as
purinergic receptor antagonists)

IT 442906-78-7P 442906-82-3P 442907-00-8P 442907-34-8P 442910-16-9P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor
antagonists)

IT 442906-79-8P 442906-80-1P 442906-81-2P 442906-84-5P 442906-86-7P
442906-88-9P 442906-90-3P 442906-92-5P 442906-94-7P 442906-96-9P
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442909-81-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor
antagonists)

| | | | | | |
|----|--------------|--------------|--------------|--------------|--------------|
| IT | 442909-82-2P | 442909-83-3P | 442909-84-4P | 442909-85-5P | 442909-86-6P |
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| | 442909-97-9P | 442909-98-0P | 442909-99-1P | 442910-00-1P | 442910-01-2P |
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| | 442910-12-5P | 442910-13-6P | 442910-14-7P | 442910-15-8P | |

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor
antagonists)

| | | | |
|----|--|--|--------------------|
| IT | 70-11-1, 2-Bromoacetophenone | 75-30-9, Isopropyl iodide | 100-11-8, |
| | 4-Nitrobenzyl bromide | 105-36-2, Ethyl bromoacetate | 106-95-6, Allyl |
| | bromide, reactions | 108-42-9, 3-Chloroaniline | 136-85-6, |
| | 5-Methyl-1H-benzotriazole | 288-42-6, Oxazole | 288-47-1, Thiazole |
| | 446-48-0, 2-Fluorobenzyl bromide | 452-80-2, 2-Fluoro-4-methylaniline | |
| | 459-57-4, 4-Fluorobenzaldehyde | 586-98-1, 2-Pyridinemethanol | 619-14-7, |
| | 3-Hydroxy-4-nitrobenzoic acid | 619-19-2, 2-Hydroxy-4-nitrobenzoic acid | |
| | 933-67-5, 7-Methylindole | 1068-55-9, Isopropylmagnesium chloride | |
| | 1195-59-1, 2,6-Pyridinedimethanol | 2713-34-0, 3,5-Difluorophenol | |
| | 3173-56-6, Benzyl isocyanate | 3731-51-9, 2-Pyridinemethylamine | |
| | 3913-23-3, 2-Methoxy-5-nitrobenzyl bromide | 6036-64-2 | 10147-36-1, |
| | Propanesulfonyl chloride | 13508-96-8, 2-Methyl-4-nitropyridine | |
| | 26177-43-5, 3-Nitrobenzylamine hydrochloride | 55583-59-0 | 58757-38-3, |
| | 6-Chloronicotinoyl chloride | 62306-79-0, 5-Methylfuran-2-boronic acid | |
| | 63024-77-1, 3-(Chloromethyl)benzoyl chloride | 76513-69-4, | |
| | 2-(Trimethylsilyl)ethoxymethyl chloride | 88780-84-1 | 118486-94-5, |
| | 2-(Tributylstannyl)furan | 119222-43-4 | 136133-18-1 |
| | 1-Methylimidazole-4-sulfonyl chloride | 146137-76-0 | 155269-59-3 |
| | 188978-71-4 | 220364-34-1 | 228106-28-3 |
| | | | 251098-53-0 |
| | 442910-96-5 | 442910-97-6 | 442910-98-7 |
| | | | 442910-99-8 |
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| | | | 442911-04-8 |

RL: RCT (Reactant); RACT (Reactant or reagent)

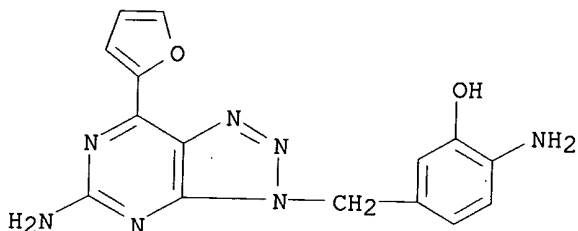
(prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor
antagonists)

| | | | | | |
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| | 442910-24-9P | 442910-26-1P | 442910-27-2P | 442910-29-4P | 442910-30-7P |
| | 442910-31-8P | 442910-32-9P | 442910-33-0P | 442910-34-1P | 442910-35-2P |
| | 442910-36-3P | 442910-37-4P | 442910-38-5P | 442910-39-6P | 442910-40-9P |
| | 442910-41-0P | 442910-42-1P | 442910-43-2P | 442910-44-3P | 442910-45-4P |
| | 442910-46-5P | 442910-47-6P | 442910-48-7P | 442910-49-8P | 442910-50-1P |
| | 442910-51-2P | 442910-52-3P | 442910-54-5P | 442910-56-7P | 442910-58-9P |
| | 442910-60-3P | 442910-62-5P | 442910-64-7P | 442910-66-9P | 442910-68-1P |
| | 442910-69-2P | 442910-70-5P | 442910-71-6P | 442910-72-7P | 442910-73-8P |
| | 442910-74-9P | 442910-75-0P | 442910-76-1P | 442910-77-2P | 442910-78-3P |
| | 442910-79-4P | 442910-80-7P | 442910-81-8P | 442910-82-9P | 442910-83-0P |
| | 442910-84-1P | 442910-85-2P | 442910-86-3P | 442910-87-4P | 442910-88-5P |
| | 442910-89-6P | 442910-90-9P | 442910-91-0P | 442910-92-1P | 442910-93-2P |
| | 442910-94-3P | 442910-95-4P | 442911-05-9P | | |

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor

antagonists)
 RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Betti, L; EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY 1999, V34(10), P867
 HCAPLUS
 (2) Cocuzza, A; BIOORGANIC & MEDICINAL CHEMISTRY LETTERS 1999, V9(7), P1063
 HCAPLUS
 (3) Du Pont Pharm Co; WO 9901439 A 1999 HCAPLUS
 (4) Giovanni, B; WO 9921617 A 1999 HCAPLUS
 IT **442908-92-1P**
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (prepn. of triazolo[4,5-d]pyrimidines as purinergic receptor
 antagonists)
 RN 442908-92-1 HCAPLUS
 CN Phenol, 2-amino-5-[[5-amino-7-(2-furanyl)-3H-1,2,3-triazolo[4,5-
 d]pyrimidin-3-yl]methyl]- (9CI) (CA INDEX NAME)



L13 ANSWER 6 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:409270 HCAPLUS
 DN 137:6173
 TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists
 IN Peng, Ge; Gallop, Mark A.; Chernov-Rogan, Tania; Yanofsky, Stephen D.;
 Pelletier, Jeffrey Claude; Green, Daniel Michael
 PA USA
 SO U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S. Ser. No. 633,025.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM A61K031-4188
 ICS C07D487-14
 NCL 514387000
 CC 28-2 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1, 13
 FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | US 2002065309 | A1 | 20020530 | US 2001-860810 | 20010518 |
| | WO 2002011732 | A1 | 20020214 | WO 2001-US24506 | 20010803 |
| | WO 2002011732 | C1 | 20020620 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
 HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
 LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2001081067 A5 20020218 AU 2001-81067 20010803
 PRAI US 1999-147233P P 19990804
 US 2000-633025 A2 20000804
 US 2001-860810 A 20010518
 WO 2001-US24506 W 20010803
 OS MARPAT 137:6173
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

- AB Title compds. I [L1, L2 and L3 are independently linking groups; m, n, q are independently 0 or 1; Y = (H)a and Z = (OH)b, c is an optional single bond, wherein, when c = single bond, a and b are both 0, when c is absent, a and b are both 1; Q = O or S; X = N or CH; R1 and R2 are either (un)substituted hydrocarbonyl (the same or different), or R1 and R2 are linked to form a 5- or 6-membered ring optionally contg. 1-3 heteroatoms (selected from N, O and S); R3 = cyclic structure of 1-3 rings that may be fused or linked, wherein 1 or more of the rings maybe arom. and/or heterocyclic; R4, R5, R6, R7 and R8 are independently selected from H, halo, OH, alkyl, alkenyl, alkoxy, etc., and further, when two of R4, R5, R6, R7 and R8 are ortho to each other, they may together form a 5- or 6-membered cyclic structure contg. 0-2 heteroatoms; R9 and R10 = H, halo, OH, alkyl, alkenyl, alkynyl, alkoxy, amino, lower alkyl-substituted amino, nitro, nitrile and carboxyl], their prepn., methods of use and pharmaceutical compns. as antagonists of the GnRH receptor are disclosed. Thus, II was prepd. in seven steps in 25% overall yield from resin bound .alpha.-BOC-.beta.-Fmoc-diaminopropionic acid with the bicyclic pyrrolidine core being formed by a zinc catalyzed intramol. cyclization. Evaluation of I for binding inhibition of human GnRH receptors provided IC50 values ranging from 35-1500 nM.
- ST pyrrolidine polycyclic prepn GnRH antagonist; bicyclic pyrrolidine prepn GnRH antagonist; GnRH receptor binding inhibition tricyclic pyrrolidine
- IT Uterus, disease
 (endometriosis, treatment of; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)
- IT Human
 (evaluation of bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists by competitive inhibition of human GnRH receptor in COS-1 cell membranes)
- IT Mammary gland, neoplasm
 Prostate gland, neoplasm
 Uterus, neoplasm
 (inhibitors; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)
- IT Contraceptives
 (novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)
- IT Gonadotropin-releasing hormone receptor
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)
- IT Ovary, disease
 (polycystic, treatment of; novel bicyclic and tricyclic pyrrolidine

derivs. as GnRH antagonists)

IT Puberty
(precocious puberty; novel bicyclic and tricyclic pyrrolidine derivs.
as GnRH antagonists)

IT Antitumor agents
(sex hormone dependent cancer; novel bicyclic and tricyclic pyrrolidine
derivs. as GnRH antagonists)

IT 2539-53-9P, Benzaldehyde, 4-ethoxy-3-hydroxy- 5447-02-9P, Benzaldehyde,
3,4-bis(phenylmethoxy)- 5703-23-1P, Benzeneacetaldehyde,
3-hydroxy-4-methoxy- 50602-41-0P, Benzeneethanol, 3-hydroxy-4-methoxy-
61315-87-5P, Benzaldehyde, 3-hydroxy-4-propoxy- 66488-78-6P,
Benzaldehyde, 4-butoxy-3-hydroxy- 397874-40-7P, Alanine,
N-[(1,1-dimethylethoxy)carbonyl]-3-[(2-nitrophenyl)sulfonyl]amino]-
397874-41-8P, Alanine, N-[(1,1-dimethylethoxy)carbonyl]-3-[(2-
nitrophenyl)sulfonyl]amino]-, methyl ester 397874-42-9P, Alanine,
3-[(2-nitrophenyl)sulfonyl]-2-propenylamino]-, methyl ester
397874-43-0P, Pyrrolo[3,4-b]pyrrole-6a(1H)-carboxylic acid,
2-[4-(dimethylamino)-1-naphthalenyl]hexahydro-5-[(3-nitrophenyl)sulfonyl]-
, methyl ester, (2R,3aR,6aR)-rel- 397874-44-1P, 1H-
Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-8-
[(3-nitrophenyl)sulfonyl]-, (5R,6aR,9aR)-rel- 397874-45-2P,
1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-,
(5R,6aR,9aR)-rel- 397874-46-3P, Pyrrolo[3,4-b]pyrrole-6a(1H)-carboxylic
acid, 2-(4-azido-1-naphthalenyl)hexahydro-5-[(3-nitrophenyl)sulfonyl]-,
methyl ester, (2R,3aR,6aR)-rel- 397874-47-4P, 1H-
Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
5-(4-azido-1-naphthalenyl)hexahydro-2-[2-(4-morpholinyl)ethyl]-8-[(3-
nitrophenyl)sulfonyl]-, (5R,6aR,9aR)-rel- 397874-48-5P,
1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
5-(4-azido-1-naphthalenyl)hexahydro-2-[2-(4-morpholinyl)ethyl]-,
(5R,6aR,9aR)-rel- 397874-49-6P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-
c]imidazole-1,3(2H)-dione, 5-(4-azido-1-naphthalenyl)hexahydro-8-[(3-
hydroxy-4-methoxyphenyl)methyl]-2-[2-(4-morpholinyl)ethyl]-,
(5R,6aR,9aR)-rel- 397874-50-9P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-
c]imidazole-1,3(2H)-dione, 5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-8-
[(4-methoxy-3-nitrophenyl)methyl]-2-[2-(4-morpholinyl)ethyl]-,
(5R,6aR,9aR)-rel- 397874-51-0P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-
c]imidazole-1,3(2H)-dione, 8-[[3,4-bis(phenylmethoxy)phenyl]methyl]-5-[4-
(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-,
(5R,6aR,9aR)-rel- 397874-52-1P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-
c]imidazole-1,3(2H)-dione, 5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-
[2-(4-morpholinyl)ethyl]-8-[[4-nitro-3-(phenylmethoxy)phenyl]methyl]-,
(5R,6aR,9aR)-rel- 397874-53-2P, Pyrrolo[3,4-b]pyrrole-6a(1H)-carboxylic
acid, hexahydro-5-[(3-nitrophenyl)sulfonyl]-2-(4-quinolinyl)-, methyl
ester, (2R,3aR,6aR)-rel- 397874-54-3P, Pyrrolo[3,4-b]pyrrole-6a(1H)-
carboxylic acid, hexahydro-1-[2-(4-morpholinyl)ethyl]-5-[(3-
nitrophenyl)sulfonyl]-2-(4-quinolinyl)-, methyl ester, (2R,3aR,6aR)-rel-
397874-55-4P, Pyrrolo[3,4-b]pyrrole-6a(1H)-carboxylic acid,
hexahydro-1-[2-(4-morpholinyl)ethyl]-2-(4-quinolinyl)-, methyl ester,
(2R,3aR,6aR)-rel- 397874-56-5P, Pyrrolo[3,4-b]pyrrole-6a(1H)-carboxylic
acid, hexahydro-2-(4-isoquinolinyl)-5-[(3-nitrophenyl)sulfonyl]-, methyl
ester, (2R,3aR,6aR)-rel- 397874-57-6P, Pyrrolo[3,4-b]pyrrole-6a(1H)-
carboxylic acid, hexahydro-2-(4-isoquinolinyl)-1-[2-(4-morpholinyl)ethyl]-
5-[(3-nitrophenyl)sulfonyl]-, methyl ester, (2R,3aR,6aR)-rel-
397874-58-7P, Pyrrolo[3,4-b]pyrrole-6a(1H)-carboxylic acid,
hexahydro-2-(4-isoquinolinyl)-1-[2-(4-morpholinyl)ethyl]-, methyl ester,

(2R,3aR,6aR)-rel-

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT 100-10-7, 4-Dimethylaminobenzaldehyde 100-74-3, N-Ethylmorpholine
106-31-0, Butyric anhydride 107-08-4, 1-Iodopropane 107-18-6, Allylic
alcohol, reactions 108-24-7, Acetic anhydride 121-32-4,
3-Ethoxy-4-hydroxybenzaldehyde 123-62-6, Propionic anhydride 139-85-5,
3,4-Dihydroxybenzaldehyde 140-31-8, 4-(2-Aminoethyl)piperazine
407-25-0, Trifluoroacetic anhydride 542-69-8, 1-Iodobutane 621-59-0,
Benzaldehyde, 3-hydroxy-4-methoxy- 1131-94-8, Benzeneacetic acid,
3-hydroxy-4-methoxy- 1694-92-4, 2-Nitrobenzenesulfonyl chloride
1971-81-9, 1-Naphthalenecarboxaldehyde, 4-(dimethylamino)- 2038-03-1,
4-Morpholineethanamine 2973-59-3, Benzaldehyde, 2-bromo-5-hydroxy-4-
methoxy- 2973-75-3, Benzaldehyde, 2,3-dibromo-4-hydroxy-5-methoxy-
4363-93-3, 4-Quinoline carboxaldehyde 13258-63-4, 4-(2-
Aminoethyl)pyridine 13669-42-6, Quinoline-3-carboxaldehyde 31680-08-7,
4-Methoxy-3-nitrobenzaldehyde 123316-85-8, 4-Azido-1-naphthaldehyde
128618-91-7, Benzaldehyde, 4-nitro-3-(phenylmethoxy)- 159002-16-1,
Alanine, N-[(1,1-dimethylethoxy)carbonyl]-3-[[9H-fluoren-9-
ylmethoxy)carbonyl]amino]-

RL: RCT (Reactant); RACT (Reactant or reagent)

(novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT 397874-25-8P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
8-[(3-amino-4-methoxyphenyl)methyl]-5-[4-(dimethylamino)-1-
naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-
397874-32-7P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
8-[[4-amino-3-(phenylmethoxy)phenyl]methyl]-5-[4-(dimethylamino)-1-
naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-
397874-33-8P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-
dione, 8-[(4-amino-3-hydroxyphenyl)methyl]-5-[4-(dimethylamino)-1-
naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)

(target compd.; novel bicyclic and tricyclic pyrrolidine derivs. as
GnRH antagonists)

IT 397874-11-2P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-8-[(3-hydroxy-4-
methoxyphenyl)methyl]-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-
397874-12-3P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
5-[4-(dimethylamino)-1-naphthalenyl]-8-[(3-ethoxy-4-
hydroxyphenyl)methyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-,
(5R,6aR,9aR)-rel- 397874-13-4P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-
c]imidazole-1,3(2H)-dione, 8-[(2,3-dibromo-4-hydroxy-5-
methoxyphenyl)methyl]-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-
(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel- 397874-14-5P,
1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
8-[(2-bromo-5-hydroxy-4-methoxyphenyl)methyl]-5-[4-(dimethylamino)-1-
naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-
397874-15-6P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
hexahydro-8-[(3-hydroxy-4-methoxyphenyl)methyl]-5-(4-methoxy-1-
naphthalenyl)-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-
397874-16-7P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
5-[4-(dimethylamino)phenyl]hexahydro-8-[(3-hydroxy-4-methoxyphenyl)methyl]-
2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel- 397874-17-8P,
1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,

5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-8-[(3-hydroxy-4-methoxyphenyl)methyl]-2-[2-(1-piperazinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-18-9P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-8-[(3-hydroxy-4-methoxyphenyl)methyl]-2-[2-(4-pyridinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-19-0P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-8-[(3-hydroxy-4-methoxyphenyl)acetyl]-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-20-3P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-8-[2-(3-hydroxy-4-methoxyphenyl)ethyl]-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-21-4P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 5-(4-amino-1-naphthalenyl)hexahydro-8-[(3-hydroxy-4-methoxyphenyl)methyl]-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-22-5P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 5-[4-(dimethylamino)-1-naphthalenyl]-8-[(4-ethoxy-3-hydroxyphenyl)methyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-23-6P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-8-[(3-hydroxy-4-propoxyphenyl)methyl]-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-24-7P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 8-[(4-butoxy-3-hydroxyphenyl)methyl]-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-26-9P, Acetamide, N-[5-[(5R,6aR,9aR)-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-1,3-dioxo-1H-pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazol-8(9H)-yl]methyl]-2-methoxyphenyl]-, rel-397874-27-0P, Acetamide, N-[5-[(5R,6aR,9aR)-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-1,3-dioxo-1H-pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazol-8(9H)-yl]methyl]-2-methoxyphenyl]-2,2,2-trifluoro-, rel-397874-28-1P, Methanesulfonamide, N-[5-[(5R,6aR,9aR)-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-1,3-dioxo-1H-pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazol-8(9H)-yl]methyl]-2-methoxyphenyl]-, rel-397874-29-2P, Butanamide, N-[5-[(5R,6aR,9aR)-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-1,3-dioxo-1H-pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazol-8(9H)-yl]methyl]-2-methoxyphenyl]-, rel-397874-30-5P, Propanamide, N-[5-[(5R,6aR,9aR)-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-1,3-dioxo-1H-pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazol-8(9H)-yl]methyl]-2-methoxyphenyl]-, rel-397874-31-6P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 8-[(3,4-dihydroxyphenyl)methyl]-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-34-9P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 8-[[4-(dimethylamino)-3-hydroxyphenyl]methyl]-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-397874-35-0P, Acetamide, N-[4-[(5R,6aR,9aR)-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-1,3-dioxo-1H-pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazol-8(9H)-yl]methyl]-2-(phenylmethoxy)phenyl]-, rel-397874-36-1P, Methanesulfonamide, N-[4-[(5R,6aR,9aR)-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-1,3-dioxo-1H-pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazol-8(9H)-yl]methyl]-2-(phenylmethoxy)phenyl]-, rel-397874-37-2P, Acetamide, N-[4-[(5R,6aR,9aR)-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-1,3-dioxo-1H-pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazol-8(9H)-yl]methyl]-2-(phenylmethoxy)phenyl]-2,2,2-trifluoro-, rel-397874-38-3P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, hexahydro-8-[(3-hydroxy-4-methoxyphenyl)methyl]-2-[2-(4-morpholinyl)ethyl]-

5-(4-quinolinyl)-, (5R,6aR,9aR)-rel- 397874-39-4P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, hexahydro-8-[(3-hydroxy-4-methoxyphenyl)methyl]-5-(4-isoquinolinyl)-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compd.; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT 397874-33-8P, 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 8-[(4-amino-3-hydroxyphenyl)methyl]-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

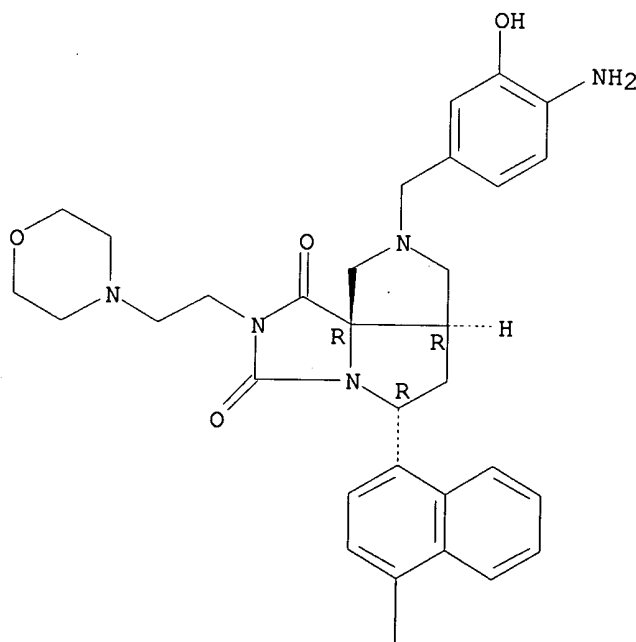
(target compd.; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

RN 397874-33-8 HCAPLUS

CN 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione, 8-[(4-amino-3-hydroxyphenyl)methyl]-5-[4-(dimethylamino)-1-naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 2-A

NMe₂

L13 ANSWER 7 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:122794 HCAPLUS
 DN 136:167362
 TI Novel bicyclic and tricyclic pyrrolidine derivatives as GnRH antagonists
 IN Peng, Ge; Gallop, Mark A.; Chernov-Rogan, Tania; Yanovsky, Stephen;
 Pelletier, Jeffrey Claude; Green, Daniel Michael
 PA Glaxo Group Limited, UK
 SO PCT Int. Appl., 118 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-535
 ICS A61K043-60; C07D211-78; C07D413-00
 CC 28-2 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1, 13
 FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | WO 2002011732 | A1 | 20020214 | WO 2001-US24506 | 20010803 |
| | WO 2002011732 | C1 | 20020620 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 2002065309 | A1 | 20020530 | US 2001-860810 | 20010518 |
| | AU 2001081067 | A5 | 20020218 | AU 2001-81067 | 20010803 |
| PRAI | US 2000-633025 | A | 20000804 | | |
| | US 2001-860810 | A | 20010518 | | |
| | US 1999-147233P | P | 19990804 | | |
| | WO 2001-US24506 | W | 20010803 | | |
| OS | MARPAT 136:167362 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [L1, L2 and L3 are independently linking groups; m, n, q are independently 0 or 1; Y = (H)a and Z = (OH)b, c is an optional single bond, wherein, when c = single bond, a and b are both 0, when c is absent, a and b are both 1; Q = O or S; X = N or CH; R1 and R2 are either (un)substituted hydrocarbonyl (the same or different), or R1 and R2 are linked to form a 5- or 6-membered ring optionally contg. 1-3 heteroatoms (selected from N, O and S); R3 = cyclic structure of 1-3 rings that may be fused or linked, wherein 1 or more of the rings maybe arom. and/or heterocyclic; R4, R5, R6, R7 and R8 are independently selected from H, halo, OH, alkyl, alkenyl, alkoxy, etc., and further, when two of R4, R5, R6, R7 and R8 are ortho to each other, they may together form a 5- or 6-membered cyclic structure contg. 0-2 heteroatoms; R9 and R10 = H, halo, OH, alkyl, alkenyl, alkynyl, alkoxy, amino, lower alkyl-substituted amino,

nitro, nitrile and carboxyl], their prepn., methods of use and pharmaceutical compns. as antagonists of the GnRH receptor are disclosed. Thus, II was prepd. in seven steps in 25% overall yield from resin bound .alpha.-BOC-.beta.-Fmoc-diaminopropionic acid with the bicyclic pyrrolidine core being formed by a zinc catalyzed intramol. cyclization. Evaluation of I for binding inhibition of human GnRH receptors provided IC50 values ranging from 35-1500 nM.

ST pyrrolidine polycyclic prepn GnRH antagonist; bicyclic pyrrolidine prepn GnRH antagonist; GnRH receptor binding inhibition tricyclic pyrrolidine

IT Uterus, disease
(endometriosis, treatment of; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Human
(evaluation of bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists by competitive inhibition of human GnRH receptor in COS-1 cell membranes)

IT Uterus, neoplasm
(inhibitors, treatment of; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Antitumor agents
(mammary gland, treatment of; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Mammary gland
Prostate gland
(neoplasm, inhibitors, treatment of; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Contraceptives
(novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Gonadotropin-releasing hormone receptor
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Ovary, disease
(polycystic, treatment of; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Puberty
(precocious puberty; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Antitumor agents
(prostate gland, treatment of; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Antitumor agents
(sex hormone dependent cancer; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT Antitumor agents
(uterus, treatment of; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT 2539-53-9P 5447-02-9P 5703-23-1P 50602-41-0P 61315-87-5P
66488-78-6P 397874-40-7P 397874-41-8P 397874-42-9P 397874-43-0P
397874-44-1P 397874-45-2P 397874-46-3P 397874-47-4P 397874-48-5P
397874-49-6P 397874-50-9P 397874-51-0P 397874-52-1P 397874-53-2P
397874-54-3P 397874-55-4P 397874-56-5P 397874-57-6P 397874-58-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT 100-10-7, 4-Dimethylaminobenzaldehyde 100-74-3, N-Ethylmorpholine
106-31-0, Butyric anhydride 107-08-4, 1-Iodopropane 107-18-6, Allylic
alcohol, reactions 108-24-7, Acetic anhydride 121-32-4,

3-Ethoxy-4-hydroxybenzaldehyde 123-62-6, Propionic anhydride 139-85-5,
 3,4-Dihydroxybenzaldehyde 140-31-8, 4-(2-Aminoethyl)piperazine
 407-25-0, Trifluoroacetic anhydride 542-69-8, 1-Iodobutane 621-59-0
 1131-94-8 1694-92-4, 2-Nitrobenzenesulfonyl chloride 1971-81-9
 2038-03-1, 4-Morpholineethanamine 2973-59-3 2973-75-3 4363-93-3,
 4-Quinoline carboxaldehyde 13258-63-4, 4-(2-Aminoethyl)pyridine
 13669-42-6, Quinoline-3-carboxaldehyde 31680-08-7, 4-Methoxy-3-
 nitrobenzaldehyde 123316-85-8, 4-Azido-1-naphthaldehyde 128618-91-7
 159002-16-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(novel bicyclic and tricyclic pyrrolidine derivs. as GnRH antagonists)

IT 397874-25-8P 397874-32-7P **397874-33-8P**

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
 preparation); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); RACT (Reactant or reagent); USES (Uses)

(target compd.; novel bicyclic and tricyclic pyrrolidine derivs. as
 GnRH antagonists)

IT 397874-11-2P 397874-12-3P 397874-13-4P 397874-14-5P 397874-15-6P
 397874-16-7P 397874-17-8P 397874-18-9P 397874-19-0P 397874-20-3P
 397874-21-4P 397874-22-5P 397874-23-6P 397874-24-7P 397874-26-9P
 397874-27-0P 397874-28-1P 397874-29-2P 397874-30-5P 397874-31-6P
 397874-34-9P 397874-35-0P 397874-36-1P 397874-37-2P 397874-38-3P
 397874-39-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(target compd.; novel bicyclic and tricyclic pyrrolidine derivs. as
 GnRH antagonists)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Goulet; US 5756507 A 1998 HCAPLUS
- (2) Peng, G; Book of Abstracts, 216th ACS Nat'l Mtg, CAPLUS 1998:530632 1998
- (3) Peng, G; J Org Chem 1999, V64, P8342 HCAPLUS

IT **397874-33-8P**

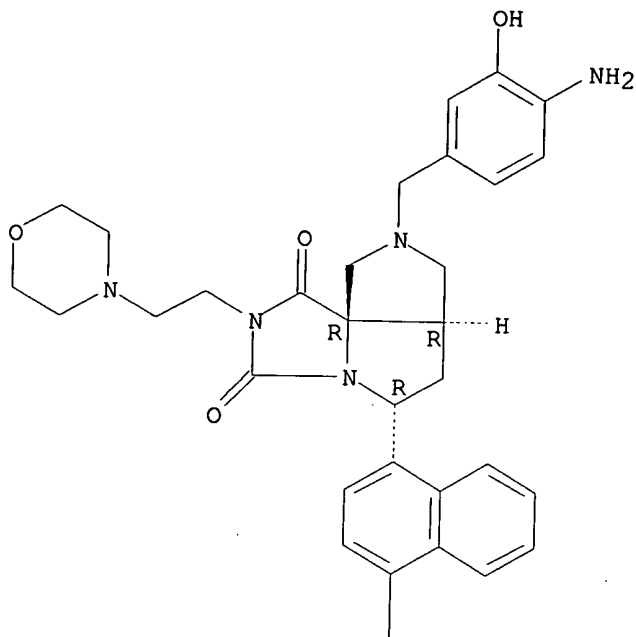
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
 preparation); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); RACT (Reactant or reagent); USES (Uses)
 (target compd.; novel bicyclic and tricyclic pyrrolidine derivs. as
 GnRH antagonists)

RN 397874-33-8 HCAPLUS

CN 1H-Pyrrolo[3',4':2,3]pyrrolo[1,2-c]imidazole-1,3(2H)-dione,
 8-[(4-amino-3-hydroxyphenyl)methyl]-5-[4-(dimethylamino)-1-
 naphthalenyl]hexahydro-2-[2-(4-morpholinyl)ethyl]-, (5R,6aR,9aR)-rel-
 (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 2-A

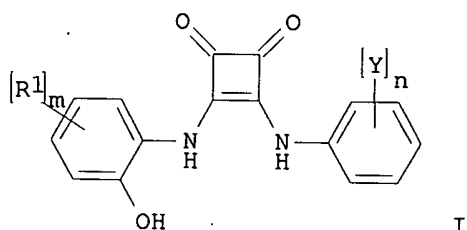
|
NMe₂

L13 ANSWER 8 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:886032 HCAPLUS
 DN 136:19932
 TI Preparation of dianilino squarates as IL-8 receptor antagonists
 IN Palovich, Michael R.; McClelland, Brent; Bi, Guangping; Werner, Michelle;
 Widdowson, Katherine L.
 PA Smithkline Beecham Corporation, USA
 SO PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07C211-00
 CC 25-10 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 1

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2001092202 | A1 | 20011206 | WO 2001-US17678 | 20010530 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, | | | | |

RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
 UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 EP 1284956 A1 20030226 EP 2001-944205 20010530
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 NO 2002005754 A 20021129 NO 2002-5754 20021129
 PRAI US 2000-207911P P 20000530
 WO 2001-US17678 W 20010530
 OS MARPAT 136:19932
 GI



- AB The title compds. [I; R1 = H, halo, NO2, etc.; Y = H, halo, NO2, etc.; n = 1-5; m = 1-4], useful in the treatment of disease states mediated by the chemokine, Interleukin-8 (IL-8), were prepd. Thus, reacting 3-ethoxy-4-(2-hydroxyanilino)-cyclobut-3-ene-1,2-dione with 2,3-dichloroaniline in the presence of DMSO in PhMe afforded I [R1 = H; Y = 2,3-Cl2]. All of the exemplified compds. I showed IC50 from about 45 to about <1 .mu.g/mL in the permissive models for IL-8 receptor inhibition. Some of exemplified compds. I were also found to be inhibitors of Gro-.alpha. binding at about the same level.
- ST dianilino squarate prepn interleukin IL8 receptor antagonist; cyclobutenedione dianilino prepn interleukin IL8 receptor antagonist; Gro alpha chemokine dianilino squarate prepn; melanoma growth stimulating activity alpha dianilino squarate prepn
- IT Interleukin 8 receptors
 Melanoma growth-stimulating activity-.alpha.
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (prepn. of dianilino squarates as IL-8 receptor antagonists)
- IT Brain, disease
 (trauma; prepn. of dianilino squarates as IL-8 receptor antagonists)
- IT 358618-10-7P 358618-12-9P 358618-14-1P 358618-16-3P 378247-94-0P
 378247-95-1P 378247-96-2P 378247-97-3P 378247-98-4P 378247-99-5P
 378248-00-1P 378248-01-2P 378248-02-3P 378248-03-4P 378248-04-5P
 378248-05-6P 378248-06-7P 378248-07-8P 378248-08-9P 378248-09-0P
 378248-11-4P 378248-12-5P 378248-13-6P 378248-14-7P 378248-15-8P
 378248-16-9P 378248-17-0P 378248-18-1P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of dianilino squarates as IL-8 receptor antagonists)
- IT 87-59-2, 2,3-Dimethylaniline 87-60-5, 3-Chloro-2-methylaniline
 90-04-0, 2-Methoxyaniline 90-41-5, 2-Aminobiphenyl 95-51-2,
 2-Chloroaniline 95-53-4, 2-Methylaniline, reactions 578-54-1,

2-Ethylaniline 583-75-5, 4-Bromo-2-methylaniline 608-27-5,
2,3-Dichloroaniline 615-36-1, 2-Bromoaniline 1821-39-2,
2-Propylaniline 2688-84-8, 2-Phenoxyaniline 5231-87-8,
3,4-Diethoxy-3-cyclobutene-1,2-dione 6299-67-8, 2,3-Dimethoxyaniline
29027-17-6, 2-Chloro-3-methylaniline 55586-26-0 282093-41-8
378248-10-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of dianilino squarates as IL-8 receptor antagonists)

IT 211172-51-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. of dianilino squarates as IL-8 receptor antagonists)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Chen; Hecheng Huaxue, CAPLUS 1999:79153 1998, V6(4), P383 HCAPLUS

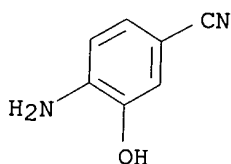
IT 55586-26-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of dianilino squarates as IL-8 receptor antagonists)

RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 9 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:521916 HCAPLUS

DN 135:107152

TI Preparation of N,N'-diphenyl ureas as IL-8 receptor antagonists

IN Widdowson, Katherine Louisa; Veber, Daniel Frank; Jurewicz, Anthony

Joseph; Hertzberg, Robert Philip; Rutledge, Melvin Clarence, Jr.

PA Smithkline Beecham Corp., USA

SO U.S., 51 pp., Cont.-in-part of U.S. 58,86,044.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K031-275

ICS C07C255-50; C07C335-16; C07C247-16

NCL 514522000

CC 25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

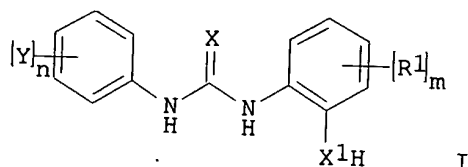
Section cross-reference(s): 1

FAN.CNT 4

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 6262113 | B1 | 20010717 | US 1998-125279 | 19980814 |
| US 5886044 | A | 19990323 | US 1996-641990 | 19960320 |
| WO 9729743 | A1 | 19970821 | WO 1996-US13632 | 19960821 |

W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG,
KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG,
SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,

MR, NE, SN, TD, TG
 US 2002128321 A1 20020912
 PRAI US 1996-641990 A2 19960320
 WO 1996-US13632 W 19960821
 US 1995-390260 B2 19950217
 WO 1996-US2260 A 19960216
 US 1998-125279 A3 19980814
 OS MARPAT 135:107152
 GI



- AB The title compds. [I; X = O; X1 = O, S; R1 = H, halo, NO2, etc.; two R1 moieties together may form O(CH2)sO, 5-6 membered unsatd. ring; s = 1-3; Y = H, halo, NO2, etc.; two Y moieties together may form O(CH2)sO, 5-6 membered unsatd. ring; n, m = 1-3], useful for treating a chemokine mediated disease, wherein the chemokine is one which binds to an IL-8 .alpha. or .beta. receptor, were prepd. Thus, reacting Me 4-amino-3-hydroxybenzoate with Ph isocyanate afforded 90% I [X = O; R = OH; R1 = 4-CO2Me; m = 1; Y = H]. All of the exemplified compds. I showed an IC50 from about 45 to about < 1 .mu.g/mL against IL-8 receptor binding. All of these compds. were also found to be inhibitors of Gro-.alpha. binding at about the same level.
- ST urea phenyl prepn interleukin receptor antagonist gro alpha inhibitor; melanoma growth stimulating activity alpha inhibitor urea phenyl prepn
- IT Melanoma growth-stimulating activity-.alpha.
 RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
 (Gro .alpha.; prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
- IT Interleukin 8 receptors
 RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
 (prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
- IT 160383-79-9P 182497-99-0P 182498-47-1P 182498-79-9P 182498-99-3P
 182499-02-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
- IT 25751-87-5P 85915-46-4P 88846-90-6P 92949-89-8P 117745-32-1P
 119838-01-6P 160383-78-8P 160383-90-4P 182498-03-9P 182498-07-3P
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| 350044-75-6P | 350044-78-9P | 350044-79-0P | 350044-80-3P | 350044-81-4P |

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)

IT 62-53-3, Aniline, reactions 86-84-0, 1-Naphthyl isocyanate 87-17-2
88-67-5, 2-Iodobenzoic acid 90-43-7, 2-Phenylphenol 91-93-0 95-54-5,
o-Phenylenediamine, reactions 95-55-6, 2-Aminophenol 98-09-9,
Phenylsulfonyl chloride 98-17-9 99-56-9, 4-Nitro-1,2-phenylenediamine
99-57-0, 5-Nitro-2-hydroxyaniline 100-46-9, Benzylamine, reactions
103-71-9, Phenyl isocyanate, reactions 106-40-1, 4-Bromoaniline
116-63-2, 1-Amino-2-hydroxy-4-naphthalenesulfonic acid 117-77-1
117-99-7 121-51-7, 3-Nitrobenzenesulfonyl chloride 121-60-8,
4-Acetamidophenylsulfonyl chloride 121-88-0, 2-Amino-5-nitrophenol
137-07-5, 2-Aminothiophenol 274-09-9, 1,3-Benzodioxole 320-76-3,
4-Bromo-2-fluoro-6-nitrophenol 329-01-1, 3-Trifluoromethylphenyl
isocyanate 385-01-3, 3-Fluoro-2-nitrophenol 394-31-0,
2-Amino-5-hydroxybenzoic acid 394-33-2, 4-Fluoro-2-nitrophenol
400-98-6, 4-Amino-3-nitrobenzotrifluoride 400-99-7, 4-Trifluoromethyl-2-
nitrophenol 444-30-4, 2-Trifluoromethylphenol 446-36-6,
5-Fluoro-2-nitrophenol 534-85-0, 2-Anilinoaniline 570-23-0,
2-Hydroxy-3-aminobenzoic acid 576-24-9, 2,3-Dichlorophenol 580-51-8,
3-Phenylphenol 603-87-2, 2-Hydroxy-3-nitroaniline 609-89-2,
4,6-Dichloro-2-nitrophenol 611-20-1, 2-Cyanophenol 614-60-8

614-68-6, 2-Methylphenyl isocyanate 615-36-1, 2-Bromoaniline 618-45-1,
3-Isopropylphenol 620-17-7, 3-Ethylphenol 644-35-9, 2-n-Propylphenol
700-87-8, 2-Methoxyphenyl isocyanate 776-04-5, 2-
(Trifluoromethyl)benzenesulfonyl chloride 837-95-6, 2-Nitro-4-
(trifluoromethyl)benzenesulfonyl chloride 873-62-1, 3-Cyanophenol
1548-13-6, 4-Trifluoromethylphenyl isocyanate 1592-00-3, 2-Bromophenyl
isocyanate 1623-92-3, 4-Phenoxybenzenesulfonyl chloride 1899-93-0
1939-99-7, Benzylsulfonyl chloride 2237-30-1, 3-Cyanoaniline
2243-42-7, 2-Phenoxybenzoic acid 2285-12-3, 2-Trifluoromethylphenyl
isocyanate 2374-03-0, 3-Hydroxy-4-aminobenzoic acid 2493-02-9,
4-Bromophenyl isocyanate 2612-57-9, 2,4-Dichlorophenyl isocyanate
2834-92-6, 1-Amino-2-hydroxynaphthalene 2835-98-5, 2-Hydroxy-4-
methylaniline 3272-08-0, 4-Cyano-2-nitrophenol 3320-83-0,
2-Chlorophenyl isocyanate 3320-86-3, 2-Nitrophenyl isocyanate
3470-49-3 4091-26-3, Styrylsulfonyl chloride 5395-71-1, 2-Ethoxyphenyl
isocyanate 5417-63-0, 3-Amino-2-hydroxynaphthalene 6272-38-4,
2-Benzyloxyphenol 6344-59-8, 1-Hydroxy-2-nitrofluorene 6399-72-0,
2-Amino-3-hydroxy-6-naphthalenesulfonic acid 13020-57-0,
3-Hydroxybenzophenone 14755-02-3 16629-19-9, 2-Thiophenesulfonyl
chloride 16744-98-2, 2-Fluorophenyl isocyanate 17337-13-2,
2-Phenylphenyl isocyanate 17573-92-1, 3-Methoxythiophene 17802-02-7,
3-Chloro-2-nitrophenol 18493-15-7 18704-37-5, 8-Quinolinylsulfonyl
chloride 18908-07-1, 3-Methoxyphenyl isocyanate 20513-43-3
21286-54-4 23095-31-0, 3,4-Dimethoxyphenylsulfonyl chloride
23138-55-8, 3-Bromophenyl isocyanate 35821-29-5 39234-86-1,
3,5-Bis(trifluoromethyl)benzenesulfonyl chloride 39262-22-1
40398-01-4, 2-Chloro-6-methylphenyl isocyanate 40411-25-4, 2-Ethylphenyl
isocyanate 41195-90-8, 2,3-Dichlorophenyl isocyanate 43115-40-8,
2-Amino-4-(ethylsulfonyl)phenol 52260-30-7, 2-(Methylthio)phenyl
isocyanate 55076-90-9, 2,4-Dibromophenyl isocyanate 63435-16-5, Methyl
4-amino-3-hydroxybenzoate 65295-69-4, 2,6-Difluorophenyl isocyanate
69812-29-9, 2-Acetamido-4-methyl-5-thiazolesulfonyl chloride 82419-26-9,
2,3-Difluoro-6-nitrophenol 99968-81-7, 3-Iodo-2-hydroxyaniline
126714-85-0, 2,3-Dichlorothiophene-5-sulfonyl chloride 146224-62-6
182500-26-1, 2-Trifluoromethoxyphenyl isocyanate 182500-27-2,
2-Amino-5,6-diphenylphenol 182500-29-4 182500-30-7,
3,5,6-Trifluoro-2-hydroxyaniline 182500-31-8, 4-Trifluoromethyl-3-fluoro-
2-hydroxyaniline 183513-64-6, 2-Chloro-3-methoxyphenyl isocyanate
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(prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
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trifluoromethylphenol 454-81-9P, 2-Amino-4-trifluoromethylphenol
454-82-0P, 2-Amino-5-trifluoromethylphenol 527-62-8P,
2-Amino-4,6-dichlorophenol 1214-44-4P 1548-62-5P, 2-Nitro-6-
trifluoromethylphenol 4291-30-9P, 2-Nitro-6-phenylphenol 4363-03-5P,
2-Amino-5-phenylphenol 5768-39-8P, 2,3-Methylenedioxybenzoic acid
7256-03-3P, 2-Amino-1-hydroxyfluorene 14543-43-2P, 2-Amino-4-cyanophenol
18062-89-0P, 2-Nitro-5-phenylphenol 18495-15-3P, 2-Nitro-5-cyanophenol
28165-60-8P, 2-Nitro-5,6-dichlorophenol 28177-79-9P,
2-Nitro-6-cyanophenol 31684-63-6P, 4-Amino-3-hydroxybenzophenone
43200-31-3P 43200-46-0P 53442-24-3P, 2-Amino-6-phenylphenol
53981-23-0P, 2-Amino-3-fluorophenol 53981-24-1P, 2-Amino-5-fluorophenol
55586-26-0P, 2-Amino-5-cyanophenol 56962-00-6P,
2-Amino-3-chlorophenol 60166-83-8P, 3-Methoxy-2-thiophenecarboxylic acid
63450-94-2P 67608-57-5P, 2-Amino-6-cyanophenol 68507-91-5P
72534-45-3P, 2-Amino-6-trifluoromethylphenol 86981-08-0P 87186-71-8P
87376-34-9P 92554-96-6P 101664-28-2P, 2-Nitro-5-ethylphenol
115023-64-8P, 2-Nitro-6-n-propylphenol 115023-65-9P,

2-Amino-6-n-propylphenol 115551-33-2P, 2-Hydroxy-3,4-difluoroaniline
116278-69-4P, 2-Amino-5,6-dichlorophenol 139729-85-4P,
2-Amino-5-isopropylphenol 152998-95-3P 153506-06-0P,
2-Nitro-5-isopropylphenol 182499-74-7P, 2-(tert-Butyldimethylsilyloxy)-4-
nitroaniline 182499-76-9P 182499-78-1P 182499-79-2P 182499-80-5P
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182499-86-1P 182499-87-2P 182499-88-3P 182499-89-4P,
2-Amino-4-bromo-6-fluorophenol 182499-90-7P, 2-Amino-5-ethylphenol
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

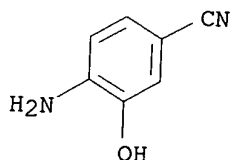
(prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD

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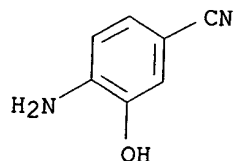
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 (57) Weigel; US 5275932 1994 HCAPLUS
 IT 55586-26-0P, 2-Amino-5-cyanophenol
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
 RN 55586-26-0 HCAPLUS
 CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



- L13 ANSWER 10 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:177295 HCAPLUS
 DN 135:45963
 TI A new intramolecular migration of the imino group of O-aryl ketoximes to
 the aryl group under the Beckmann condition
 AU Kikugawa, Y.; Tsuji, C.; Miyazawa, E.; Sakamoto, T.
 CS Faculty of Pharmaceutical Sciences, Josai University, Sakado, Saitama,
 350-0295, Japan
 SO Tetrahedron Letters (2001), 42(12), 2337-2339
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 CC 25-10 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 OS CASREACT 135:45963
 AB ZrCl4-mediated decompn. of O-aryl ketoximes in C6H6 leads to
 regioselective intramol. migration of the imino group from the O to the

ortho position of the aryl group via electron-deficient N intermediates.
 ST aryl ketoxime imino group migration Beckmann; phenolic amine prep
 IT Phenols, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (amino; intramol. migration of imino group of O-aryl ketoximes to aryl group under Beckmann condition)
 IT Functional groups
 (imino group; intramol. migration of imino group of O-aryl ketoximes to aryl group under Beckmann condition)
 IT Beckmann rearrangement
 (intramol. migration of imino group of O-aryl ketoximes to aryl group under Beckmann condition)
 IT Ketoximes
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (intramol. migration of imino group of O-aryl ketoximes to aryl group under Beckmann condition)
 IT Amines, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (phenolic; intramol. migration of imino group of O-aryl ketoximes to aryl group under Beckmann condition)
 IT 13130-15-9 13267-51-1 16237-96-0 29127-87-5 32220-22-7
 61694-14-2 344614-93-3 344614-94-4 344614-95-5 344614-96-6
 344614-97-7 344614-98-8 344614-99-9 344615-00-5 344615-01-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (intramol. migration of imino group of O-aryl ketoximes to aryl group under Beckmann condition)
 IT 95-55-6P 95-84-1P 95-85-2P 527-62-8P 574-45-8P 767-00-0P,
 4-Cyanophenol 873-62-1P, 3-Cyanophenol 6358-15-2P 14543-43-2P
 28165-50-6P **55586-26-0P** 75729-97-4P 109810-25-5P
 211172-52-0P 344615-02-7P 344615-03-8P 344615-04-9P 344615-05-0P
 344615-06-1P 344765-01-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (intramol. migration of imino group of O-aryl ketoximes to aryl group under Beckmann condition)
 RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Akiyama, T; Synlett 1996, P1095 HCAPLUS
 (2) Alam, N; J Org Chem 1988, V53, P1496 HCAPLUS
 (3) Alemagna, A; J Chem Soc Chem Commun 1985, P417 HCAPLUS
 (4) Castellino, A; J Org Chem 1984, V49, P1348 HCAPLUS
 (5) Craig, D; Comprehensive Organic Synthesis 1991, V7, P689
 (6) Firouzabadi, H; Synlett 1999, P321 HCAPLUS
 (7) Gawley, R; Org Reac 1988, P351
 (8) Lenarsic, R; J Org Chem 1999, V64, P2558 HCAPLUS
 (9) Miyazawa, E; J Chem Soc Perkin Trans 2 1998, P7 HCAPLUS
 (10) Mooradian, A; Tetrahedron Lett 1967, P2867 HCAPLUS
 (11) Robinson, B; The Fischer Indole Synthesis 1982
 (12) Sheradsky, T; Tetrahedron Lett 1966, P5225 HCAPLUS
 IT **55586-26-0P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (intramol. migration of imino group of O-aryl ketoximes to aryl group under Beckmann condition)
 RN 55586-26-0 HCAPLUS
 CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 11 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:152525 HCAPLUS
 DN 134:212695
 TI Drug conjugates comprising vector-linker-pharmacophore and methods of
 designing the same
 IN Brenner, Sydney; Goelet, Philip; Stackhouse, Joseph; Millward, Steven W.
 PA USA
 SO PCT Int. Appl., 196 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K047-48
 CC 63-5 (Pharmaceuticals)
 Section cross-reference(s): 28

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|--|----------|-----------------|----------|
| PI | WO 2001013958 | A2 | 20010301 | WO 2000-US23593 | 20000828 |
| | WO 2001013958 | A3 | 20020131 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | EP 1212096 | A2 | 20020612 | EP 2000-959512 | 20000828 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | |
| | JP 2003507439 | T2 | 20030225 | JP 2001-518093 | 20000828 |
| PRAI | US 1999-150765P | P | 19990826 | | |
| | US 1999-150894P | P | 19990826 | | |
| | US 2000-184411P | P | 20000223 | | |
| | US 2000-184412P | P | 20000223 | | |
| | WO 2000-US23593 | W | 20000828 | | |
| AB | The invention relates to drug conjugates and methods of their design. One embodiment of the invention is directed to a method of designing vector-linker-pharmacophore (VLP) conjugates that is generally applicable to a wide variety of vectors, linkers, and pharmacophores. The invention also encompasses a method of improving the delivery of a pharmacophore to a patient, as well as a method of improving the therapeutic efficacy of a pharmacophore and a method of decreasing the toxicity of a pharmacophore. A method of increasing the concn. of a pharmacophore in a cell is further encompassed by the invention. Prepn. of many VLP conjugates including conjugates of kirromycin-3-nitro-4-hydrazidophenylthioethanol-tetracycline deriv., are disclosed. | | | | |

- ST drug conjugate vector linker pharmacophore; kirromycin
- IT hydrazidophenylthioethanol tetracycline deriv conjugate prepn
- IT Infection
 - (bacterial; drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT Antibacterial agents
 - Antibiotics
 - Antiviral agents
 - Fungicides
 - Parasiticides
 - Protozoacides
 - (conjugates; drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT Polyoxyalkylenes, biological studies
 - Polysaccharides, biological studies
 - RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (conjugates; drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT Drug delivery systems
 - Eukaryote (Eukaryotae)
 - Infection
 - Ionophores
 - Pathogen
 - Ribosome
 - (drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT Glycosylation
 - Mycoplasma
 - (inhibitors; drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT Enzymes, biological studies
 - Proteins, general, biological studies
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
 - (inhibitors; drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT DNA
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
 - (modifiers; drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT Nucleic acids
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
 - (mutagens; drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT Alkylating agents, biological
 - (of nucleic acids; drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT 86386-73-4, Fluconazole
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
 - (drug conjugates comprising vector-linker-pharmacophore and methods of designing same)
- IT 58-85-5DP, Biotin, conjugate with penicillin derivs. 58-85-5DP, Biotin, conjugates 60-54-8DP, Tetracycline, conjugates 525-97-3DP, Penicillin a, derivs., conjugate with biotin 738-70-5DP, Trimethoprim, conjugates 738-70-5DP, Trimethoprim, reaction with kirromycin conjugates 1406-05-9DP, Penicillin, conjugates 11076-17-8DP, Sordarin, conjugates

with antibiotics 86386-73-4DP, Fluconazole, conjugates 328401-25-8P
328401-69-0DP, reaction with tetracycline and trimethoprim derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug conjugates comprising vector-linker-pharmacophore and methods of
designing same)

IT 50-00-0, Formaldehyde, reactions 60-23-1, 2-Mercaptoethylamine
60-54-8D, Tetracycline, reaction with kirromycin conjugates 64-17-5,
Ethanol, reactions 64-18-6, Formic acid, reactions 97-51-8,
5-Nitrosalicylaldehyde 100-39-0, Benzyl bromide 103-84-4,
Acetylaniline 108-24-7, Acetic anhydride 109-64-8, 1,3 DiBromopropane
111-30-8, Glutardialdehyde 124-40-3, Dimethylamine, reactions
124-41-4, Sodium methoxide 124-63-0, Methylsulfonyl chloride 142-28-9,
1,3 Dichloropropane 156-81-0, 2,4 Diaminopyrimidine 302-01-2,
Hydrazine, reactions 530-62-1 540-88-5, Tert-Butylacetate 551-16-6,
6-Aminopenicillanic acid 598-21-0, BROMOACETYL BROMIDE 601-89-8,
2-Nitroresorcinol 605-65-2, Dansyl chloride 624-84-0, Formyl hydrazine
627-31-6 928-01-8, Maleamide 1003-10-7, .gamma.-Thiobutylolactone
1197-55-3, 4-Aminophenylacetic acid 1313-82-2, Sodium sulfide, reactions
2393-24-0 2950-43-8, Hydroxylamine-O-sulfonic acid 3483-12-3,
Dithiothreitol 3963-95-9, Methacycline hydrochloride 4163-60-4
4829-04-3, 1,3-Dithiolane 5414-21-1, 5-Bromovaleronitrile 5470-11-1,
Hydroxylamine hydrochloride 6258-60-2, 4-Methoxybenzylmercaptan
6539-14-6, Traut's reagent 6625-20-3, 6-Demethyl 6 deoxytetracycline
hydrochloride 7631-99-4, Sodium nitrate, reactions 7664-41-7, Ammonia,
reactions 7681-49-4, Sodium fluoride, reactions 7697-37-2, Nitric
acid, reactions 7790-28-5, Sodium periodate 7791-25-5, Sulfonfyl
chloride 10028-15-6, Ozone, reactions 10035-10-6, Hydrobromic acid,
reactions 10592-13-9, Doxycycline hydrochloride 13154-24-0,
Triisopropylsilyl chloride 16940-66-2, Sodium borohydride 21908-53-2,
Mercuric oxide 22542-53-6 23361-78-6 25155-26-4, Dimethoxyphenol
25895-60-7, Sodium cyanoborohydride 38078-09-0, Diethylaminosulfur
trifluoride 41661-47-6, 4-Piperidone 50935-71-2, Kirromycin
53152-67-3 69468-17-3, Diaminobutane 72040-63-2 84030-21-7
93285-75-7 109276-34-8 134759-23-2 205584-10-7 328400-58-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(drug conjugates comprising vector-linker-pharmacophore and methods of
designing same)

IT 104-10-9P 107-68-6P, N-Methyltaurine 501-53-1P, Carbobenzyloxy
chloride 1007-54-1P 3163-15-3P, 2-Aminoresorcinol 5063-96-7P
6066-83-7P, 5-Aminovaleronitrile 15896-61-4P 17385-61-4P 19285-38-2P
21253-57-6P 21253-58-7P 21822-24-2P 52648-14-3P,
1-N-Desmethylgoldinamine 73164-56-4P 74219-55-9P 86386-77-8P
116435-82-6P 120793-45-5P 143429-10-1P 155834-18-7P 161321-16-0P
161321-34-2P 188434-24-4P 188434-25-5P 188434-26-6P 328400-43-7P
328400-46-0P 328400-48-2P 328400-50-6P 328400-52-8P 328400-54-0P
328400-56-2P 328400-60-8P 328400-62-0P 328400-64-2P 328400-66-4P
328400-68-6P 328400-71-1P 328400-73-3P 328400-75-5P 328400-77-7P
328400-79-9P 328400-81-3P 328400-83-5P 328400-87-9P 328400-89-1P
328400-91-5P 328400-93-7P 328400-95-9P 328400-98-2P 328401-02-1P
328401-08-7P 328401-09-8P 328401-10-1P 328401-11-2P 328401-12-3P
328401-13-4P 328401-14-5P 328401-15-6P 328401-16-7P 328401-17-8P
328401-18-9P 328401-19-0P 328401-20-3P 328401-21-4P 328401-22-5P
328401-23-6P 328401-24-7P 328401-26-9P 328401-27-0P 328401-28-1P
328401-29-2P 328401-30-5P 328401-31-6P 328401-32-7P 328401-33-8P
328401-34-9P 328401-35-0P 328401-36-1P 328401-37-2P 328401-38-3P
328401-39-4P 328401-40-7P 328401-41-8P 328401-42-9P 328401-43-0P

328401-44-1P 328401-45-2P 328401-46-3P 328401-47-4P 328401-48-5P
 328401-49-6P 328401-50-9P 328401-51-0P 328401-53-2P 328401-54-3P
 328401-55-4P 328401-57-6P **328401-59-8P** 328401-61-2P
 328401-63-4P 328401-64-5P 328401-66-7P 328401-68-9P 328401-69-0DP,
 derivs. 328401-71-4P 328401-72-5P 328401-73-6P 328401-74-7P
 328401-75-8P 328401-76-9P 328401-77-0P 328899-82-7P, Goldinonic acid
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(drug conjugates comprising vector-linker-pharmacophore and methods of
 designing same)

IT 9002-98-6DP, conjugates 25322-68-3DP, Polyethylene glycol, conjugates
 26913-06-4DP, Poly[imino(1,2-ethanediyl)], conjugates 86386-73-4DP,
 Fluconazole, conjugates with vectors and linkers
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
 study); PREP (Preparation); USES (Uses)
 (drug conjugates comprising vector-linker-pharmacophore and methods of
 designing same)

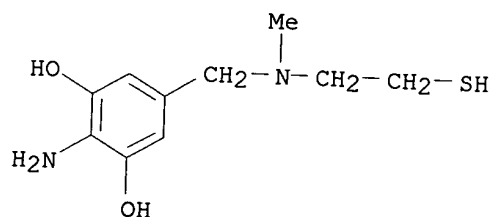
IT 9014-24-8, Transcriptase
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (drug conjugates comprising vector-linker-pharmacophore and methods of
 designing same)

IT 9001-92-7, Protease 9002-03-3, Dihydrofolate reductase 9013-05-2,
 Phosphatase 9031-44-1, Kinase 9037-17-6, Nucleic acid polymerase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; drug conjugates comprising vector-linker-pharmacophore and
 methods of designing same)

IT **328401-59-8P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (drug conjugates comprising vector-linker-pharmacophore and methods of
 designing same)

RN 328401-59-8 HCAPLUS

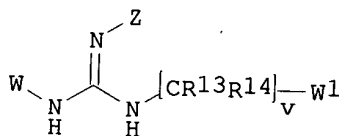
CN 1,3-Benzenediol, 2-amino-5-[[(2-mercaptoethyl)methylamino]methyl]- (9CI)
 (CA INDEX NAME)



L13 ANSWER 12 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2000:900459 HCAPLUS
 DN 134:56484
 TI Preparation of novel guanidine containing compounds as IL-8 receptor
 antagonists
 IN Bryan, Deborah L.; Gleason, John G.; Widdowson, Katherine L.; Benson,
 Gregory M.
 PA Smithkline Beecham Corporation, USA
 SO PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DT Patent

LA English
 IC ICM A61K031-47
 ICS A61K031-495; A61K031-38; A61K047-28; A61K031-17
 CC 25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 1
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2000076516 | A1 | 20001221 | WO 2000-US16813 | 20000616 |
| | W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, DZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | BR 2000010985 | A | 20020326 | BR 2000-10985 | 20000616 |
| | EP 1191934 | A1 | 20020403 | EP 2000-942933 | 20000616 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | JP 2003501471 | T2 | 20030114 | JP 2001-502849 | 20000616 |
| | ZA 2001010203 | A | 20020911 | ZA 2001-10203 | 20001212 |
| | NO 2001006065 | A | 20011212 | NO 2001-6065 | 20011212 |
| PRAI | US 1999-139674P | P | 19990616 | | |
| | WO 2000-US16813 | W | 20000616 | | |
| OS | MARPAT 134:56484 | | | | |
| GI | | | | | |



I

AB The title compds. [I; Z = CN, OR11, COR15R16, etc.; v = 0-4; R11 = H, alkyl, aryl, etc.; R13, R14 = H, alkyl; or one of R13 and R14 may be optionally substituted aryl; R15, R16 = H, alkyl, aryl; W, W1 = (un)substituted Ph, 2,3-methylenedioxyphenyl, etc.], useful in the treatment of disease states mediated by the chemokine, Interleukin-8 (IL-8), were prepd. Thus, reacting sodium salt of N-(2-chlorophenyl)-N'-cyanothiourea (prepn. given) with 2-hydroxy-3-nitroaniline in the presence of EDC.HCl in DMF afforded 9% I [Z = CN; v = 0; W = 2-OH-3-NO2C6H3; W1 = 2-ClC6H4]. The exemplified compds. I showed IC50 of 5-100 nM in the permissive models (IL-8b) for IL-8 receptor inhibition.

ST guanidine prepn interleukin receptor antagonist

IT Interleukin 8 receptors

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)

(prepn. of novel guanidine contg. compds. as IL-8 receptor antagonists)

IT 203201-26-7P 203201-27-8P 203201-28-9P 203201-29-0P 203201-30-3P
 203201-31-4P 203201-32-5P 203201-33-6P 203201-34-7P 203201-35-8P
 313640-97-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of novel guanidine contg. compds. as IL-8 receptor antagonists)
IT 100-39-0, Benzyl bromide 103-72-0, Phenyl isothiocyanate 106-95-6,
Allyl bromide, reactions 303-07-1, 2,6-Dihydroxybenzoic acid 603-87-2,
2-Hydroxy-3-nitroaniline 1458-98-6, 3-Bromo-2-methyl-1-propene
2740-81-0, 2-Chlorophenyl isothiocyanate 6590-97-2, 2,3-Dichlorophenyl
isothiocyanate 13037-60-0, 2-Bromophenyl isothiocyanate 18495-15-3,
3-Hydroxy-4-nitrobenzonitrile 203201-48-3, 2-Allyloxy-4-cyano-3-
propylaniline 203201-49-4, 2,3-Methylenedioxyphenyl isothiocyanate
RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of novel guanidine contg. compds. as IL-8 receptor antagonists)
IT 2150-45-0P 74292-74-3P 144264-60-8P 151322-76-8P 203190-56-1P
203190-57-2P 203190-59-4P 203190-60-7P 203201-37-0P 203201-38-1P
203201-39-2P 203201-40-5P **203201-41-6P 203201-42-7P**
203201-43-8P 203201-44-9P 203201-45-0P 203201-46-1P
203201-47-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. of novel guanidine contg. compds. as IL-8 receptor antagonists)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Warner-Lambert Corp; EP 0344425 A2 1989 HCAPLUS

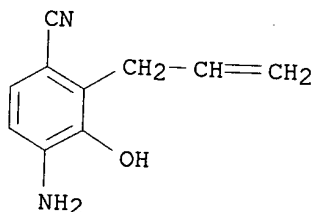
(2) Widdowson; US 5780483 A 1998 HCAPLUS

IT **203201-41-6P 203201-42-7P 203201-47-2P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

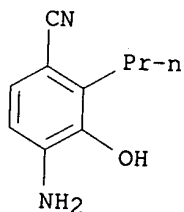
(prepn. of novel guanidine contg. compds. as IL-8 receptor antagonists)
RN 203201-41-6 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy-2-(2-propenyl)- (9CI) (CA INDEX NAME)



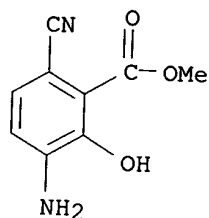
RN 203201-42-7 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy-2-propyl- (9CI) (CA INDEX NAME)



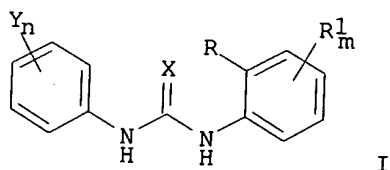
RN 203201-47-2 HCAPLUS

CN Benzoic acid, 3-amino-6-cyano-2-hydroxy-, methyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 13 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2000:900438 HCAPLUS
 DN 134:56482
 TI Preparation of N,N'-diphenyl ureas as IL-8 receptor antagonists
 IN Benson, Gregory Martin; Hertzberg, Robert P.; Jurewicz, Anthony J.;
 Rutledge, Melvin Clarence; Veber, Daniel F.; Widdowson, Katherine L.
 PA Smithkline Beecham Corporation, USA
 SO PCT Int. Appl., 101 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-27
 CC 25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 1
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI WO 2000076495 | A1 | 20001221 | WO 2000-US16499 | 20000615 |
| W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, DZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| BR 2000010802 | A | 20020219 | BR 2000-10802 | 20000615 |
| EP 1185261 | A1 | 20020313 | EP 2000-942843 | 20000615 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2003501459 | T2 | 20030114 | JP 2001-502828 | 20000615 |
| ZA 2001009479 | A | 20021118 | ZA 2001-9479 | 20011116 |
| NO 2001006053 | A | 20011211 | NO 2001-6053 | 20011211 |
| PRAI US 1999-139675P | P | 19990616 | | |
| WO 2000-US16499 | W | 20000615 | | |
| OS MARPAT 134:56482 | | | | |
| GI | | | | |



- AB The title compds. [I; X = O, S; R = any functional moiety having an ionizable H and pKa of .ltoreq. 10; R1 = H, halo, NO2, etc.; two R1 moieties together may form O(CH2)sO, 5-6 membered unsatd. ring; s = 1-3; Y = H, halo, NO2, etc.; two Y moieties together may form O(CH2)sO, 5-6 membered unsatd. ring; n, m = 1-3], useful for treating a chemokine mediated disease, wherein the chemokine is one which binds to an IL-8 .alpha. or .beta. receptor, were prepd. Thus, reacting Me 4-amino-3-hydroxybenzoate with Ph isocyanate afforded 90% I [X = O; R = OH; R1 = 4-CO2Me; m = 1; Y = H]. All of the exemplified compds. I showed an IC50 from about 45 to about < 1 .mu.g/mL against IL-8 receptor binding. All of these compds. were also found to be inhibitors of Gro-.alpha. binding at about the same level.
- ST urea phenyl prepn interleukin receptor antagonist gro alpha inhibitor; melanoma growth stimulating activity alpha inhibitor urea phenyl prepn
- IT Melanoma growth-stimulating activity-.alpha.
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(Gro .alpha.; prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
- IT Interleukin 8 receptors
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
- IT 160383-79-9P 182497-99-0P 182498-47-1P 182498-79-9P 182498-99-3P 182499-02-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
- IT 25751-87-5P 85915-46-4P 88846-90-6P 92949-89-8P 117745-32-1P
160383-78-8P 182498-03-9P 182498-07-3P 182498-11-9P 182498-15-3P
182498-18-6P 182498-20-0P 182498-22-2P 182498-25-5P 182498-26-6P
182498-28-8P 182498-30-2P 182498-31-3P 182498-32-4P 182498-33-5P
182498-34-6P 182498-35-7P 182498-38-0P 182498-40-4P 182498-42-6P
182498-44-8P 182498-45-9P 182498-46-0P 182498-48-2P 182498-50-6P
182498-52-8P 182498-54-0P 182498-55-1P 182498-57-3P 182498-59-5P
182498-62-0P 182498-63-1P 182498-64-2P 182498-66-4P 182498-67-5P
182498-68-6P 182498-69-7P 182498-70-0P 182498-71-1P 182498-72-2P
182498-73-3P 182498-74-4P 182498-75-5P 182498-76-6P 182498-77-7P
182498-78-8P 182498-80-2P 182498-81-3P 182498-82-4P 182498-83-5P
182498-84-6P 182498-85-7P 182498-86-8P 182498-87-9P 182498-88-0P
182498-89-1P 182498-90-4P 182498-91-5P 182498-92-6P 182498-93-7P
182498-94-8P 182498-95-9P 182498-97-1P 182498-98-2P 182499-00-9P
182499-01-0P 182499-03-2P 182499-05-4P 182499-06-5P 182499-07-6P
182499-08-7P 182499-09-8P 182499-10-1P 182499-11-2P 182499-12-3P
182499-13-4P 182499-14-5P 182499-15-6P 182499-16-7P 182499-17-8P
182499-18-9P 182499-19-0P 182499-20-3P 182499-21-4P 182499-22-5P
182499-23-6P 182499-25-8P 182499-26-9P 182499-27-0P 182499-28-1P
182499-29-2P 182499-30-5P 182499-31-6P 182499-32-7P 182499-33-8P
182499-34-9P 182499-35-0P 182499-36-1P 182499-37-2P 182499-38-3P
182499-39-4P 182499-40-7P 182499-41-8P 182499-42-9P 182499-43-0P
182499-44-1P 182499-45-2P 182499-46-3P 182499-47-4P 182499-48-5P
182499-49-6P 182499-50-9P 182499-51-0P 182499-52-1P 182499-53-2P
182499-54-3P 182499-55-4P 182499-56-5P 182499-57-6P 182499-58-7P
182499-59-8P 182499-60-1P 182499-61-2P 182499-62-3P 182499-63-4P
182499-64-5P 182499-65-6P 182499-66-7P 182499-67-8P 182499-68-9P

182499-69-0P 182499-70-3P 182499-71-4P 182499-72-5P 182501-57-1P
182700-31-8P 222172-42-1P 313688-79-8P 313688-80-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
IT 62-53-3, Aniline, reactions 86-84-0, 1-Naphthyl isocyanate 87-17-2
88-67-5, 2-Iodobenzoic acid 90-43-7, 2-Phenylphenol 91-93-0 95-54-5,
o-Phenylenediamine, reactions 95-55-6, 2-Aminophenol 98-09-9,
Phenylsulfonyl chloride 98-17-9 99-56-9, 4-Nitro-1,2-phenylenediamine
99-57-0, 5-Nitro-2-hydroxyaniline 100-46-9, Benzylamine, reactions
103-71-9, Phenyl isocyanate, reactions 106-40-1, 4-Bromoaniline
116-63-2, 1-Amino-2-hydroxy-4-naphthalenesulfonic acid 117-77-1
117-99-7 121-51-7, 3-Nitrobenzenesulfonyl chloride 121-60-8,
4-Acetamidophenylsulfonyl chloride 121-88-0, 2-Amino-5-nitrophenol
137-07-5, 2-Aminothiophenol 274-09-9, 1,3-Benzodioxole 320-76-3,
4-Bromo-2-fluoro-6-nitrophenol 329-01-1, 3-Trifluoromethylphenyl
isocyanate 385-01-3, 3-Fluoro-2-nitrophenol 394-31-0,
2-Amino-5-hydroxybenzoic acid 394-33-2, 4-Fluoro-2-nitrophenol
400-98-6, 4-Amino-3-nitrobenzotrifluoride 400-99-7, 4-Trifluoromethyl-2-
nitrophenol 444-30-4, 2-Trifluoromethylphenol 446-36-6,
5-Fluoro-2-nitrophenol 534-85-0, 2-Anilinoaniline 570-23-0,
2-Hydroxy-3-aminobenzoic acid 576-24-9, 2,3-Dichlorophenol 580-51-8,
3-Phenylphenol 603-87-2, 2-Hydroxy-3-nitroaniline 609-89-2,
4,6-Dichloro-2-nitrophenol 611-20-1, 2-Cyanophenol 614-60-8
614-68-6, 2-Methylphenyl isocyanate 615-36-1, 2-Bromoaniline 618-45-1,
3-Isopropylphenol 620-17-7, 3-Ethylphenol 644-35-9, 2-n-Propylphenol
700-87-8, 2-Methoxyphenyl isocyanate 776-04-5, 2-
(Trifluoromethyl)benzenesulfonyl chloride 837-95-6, 2-Nitro-4-
(trifluoromethyl)benzenesulfonyl chloride 873-62-1, 3-Cyanophenol
1548-13-6, 4-Trifluoromethylphenyl isocyanate 1592-00-3, 2-Bromophenyl
isocyanate 1623-92-3, 4-Phenoxybenzenesulfonyl chloride 1899-93-0
1939-99-7, Benzylsulfonyl chloride 2237-30-1, 3-Cyanoaniline
2243-42-7, 2-Phenoxybenzoic acid 2285-12-3, 2-Trifluoromethylphenyl
isocyanate 2374-03-0, 3-Hydroxy-4-aminobenzoic acid 2493-02-9,
4-Bromophenyl isocyanate 2612-57-9, 2,4-Dichlorophenyl isocyanate
2834-92-6, 1-Amino-2-hydroxynaphthalene 2835-98-5, 2-Hydroxy-4-
methylaniline 3272-08-0, 4-Cyano-2-nitrophenol 3320-83-0,
2-Chlorophenyl isocyanate 3320-86-3, 2-Nitrophenyl isocyanate
3470-49-3 4091-26-3, Styrylsulfonyl chloride 5395-71-1, 2-Ethoxyphenyl
isocyanate 5417-63-0, 3-Amino-2-hydroxynaphthalene 6272-38-4,
2-Benzyloxyphenol 6344-59-8, 1-Hydroxy-2-nitrofluorene 6399-72-0,
2-Amino-3-hydroxy-6-naphthalenesulfonic acid 13020-57-0,
3-Hydroxybenzophenone 14755-02-3 16629-19-9, 2-Thiophenesulfonyl
chloride 16744-98-2, 2-Fluorophenyl isocyanate 17337-13-2,
2-Phenylphenyl isocyanate 17573-92-1, 3-Methoxythiophene 17802-02-7,
3-Chloro-2-nitrophenol 18493-15-7 18704-37-5, 8-Quinolinylsulfonyl
chloride 18908-07-1, 3-Methoxyphenyl isocyanate 20513-43-3
21286-54-4 23095-31-0, 3,4-Dimethoxyphenylsulfonyl chloride
23138-55-8, 3-Bromophenyl isocyanate 35821-29-5 39234-86-1,
3,5-Bis(trifluoromethyl)benzenesulfonyl chloride 39262-22-1
40398-01-4, 2-Chloro-6-methylphenyl isocyanate 40411-25-4, 2-Ethylphenyl
isocyanate 41195-90-8, 2,3-Dichlorophenyl isocyanate 43115-40-8,
2-Amino-4-(ethylsulfonyl)phenol 52260-30-7, 2-(Methylthio)phenyl
isocyanate 55076-90-9, 2,4-Dibromophenyl isocyanate 63435-16-5, Methyl
4-amino-3-hydroxybenzoate 65295-69-4, 2,6-Difluorophenyl isocyanate
69812-29-9, 2-Acetamido-4-methyl-5-thiazolesulfonyl chloride 82419-26-9,
2,3-Difluoro-6-nitrophenol 99968-81-7, 3-Iodo-2-hydroxyaniline

126714-85-0, 2,3-Dichlorothiophene-5-sulfonyl chloride 146224-62-6
 182500-26-1, 2-Trifluoromethoxyphenyl isocyanate 182500-27-2,
 2-Amino-5,6-diphenylphenol 182500-29-4 182500-30-7,
 3,5,6-Trifluoro-2-hydroxyaniline 182500-31-8, 4-Trifluoromethyl-3-fluoro-
 2-hydroxyaniline 183513-64-6, 2-Chloro-3-methoxyphenyl isocyanate
 RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)
 IT 399-97-3P, 2-Amino-4-fluorophenol 402-17-5P, 2-Nitro-5-
 trifluoromethylphenol 454-81-9P, 2-Amino-4-trifluoromethylphenol
 454-82-0P, 2-Amino-5-trifluoromethylphenol 527-62-8P,
 2-Amino-4,6-dichlorophenol 1214-44-4P 1548-62-5P, 2-Nitro-6-
 trifluoromethylphenol 4291-30-9P, 2-Nitro-6-phenylphenol 4363-03-5P,
 2-Amino-5-phenylphenol 5768-39-8P, 2,3-Methylenedioxybenzoic acid
 7256-03-3P, 2-Amino-1-hydroxyfluorene 14543-43-2P, 2-Amino-4-cyanophenol
 18062-89-0P, 2-Nitro-5-phenylphenol 18495-15-3P, 2-Nitro-5-cyanophenol
 28165-60-8P, 2-Nitro-5,6-dichlorophenol 28177-79-9P,
 2-Nitro-6-cyanophenol 31684-63-6P, 4-Amino-3-hydroxybenzophenone
 43200-31-3P 43200-46-0P 53442-24-3P, 2-Amino-6-phenylphenol
 53981-23-0P, 2-Amino-3-fluorophenol 53981-24-1P, 2-Amino-5-fluorophenol
55586-26-0P, 2-Amino-5-cyanophenol 56962-00-6P,
 2-Amino-3-chlorophenol 60166-83-8P, 3-Methoxy-2-thiophenecarboxylic acid
 63450-94-2P 67608-57-5P, 2-Amino-6-cyanophenol 68507-91-5P
 72534-45-3P, 2-Amino-6-trifluoromethylphenol 86981-08-0P 87186-71-8P
 87376-34-9P 92554-96-6P 101664-28-2P, 2-Nitro-5-ethylphenol
 115023-64-8P, 2-Nitro-6-n-propylphenol 115023-65-9P,
 2-Amino-6-n-propylphenol 115551-33-2P, 2-Hydroxy-3,4-difluoroaniline
 116278-69-4P, 2-Amino-5,6-dichlorophenol 139729-85-4P,
 2-Amino-5-isopropylphenol 152998-95-3P 153506-06-0P,
 2-Nitro-5-isopropylphenol 182499-74-7P, 2-(tert-Butyldimethylsilyloxy)-4-
 nitroaniline 182499-76-9P 182499-78-1P 182499-79-2P 182499-80-5P
 182499-81-6P 182499-82-7P 182499-83-8P 182499-84-9P 182499-85-0P
 182499-86-1P 182499-87-2P 182499-88-3P 182499-89-4P,
 2-Amino-4-bromo-6-fluorophenol 182499-90-7P, 2-Amino-5-ethylphenol
 182499-91-8P, 2-Nitro-5-methyl-6-bromophenol 182499-92-9P,
 2-Nitro-5-methyl-6-cyanophenol 182499-93-0P, 2-Amino-5-methyl-6-
 cyanophenol 182499-94-1P, 3-Hydroxy-4-nitrobenzophenone 182499-95-2P,
 3-Nitro-2-hydroxybenzophenone 182499-96-3P, 3-Amino-2-
 hydroxybenzophenone 182499-97-4P, 2-Benzyloxy-6-nitrophenol
 182499-98-5P, 2-Amino-6-benzyloxyphenol 182499-99-6P 182500-00-1P
 182500-01-2P 182500-02-3P 182500-03-4P 182500-04-5P 182500-05-6P
 182500-06-7P 182500-07-8P 182500-08-9P 182500-09-0P 182500-10-3P
 182500-11-4P 182500-12-5P 182500-13-6P 182500-14-7P 182500-15-8P
 182500-16-9P 182500-17-0P 182500-18-1P 182500-19-2P 182500-20-5P
 182500-21-6P 182500-22-7P 182500-23-8P 182500-24-9P 182500-25-0P
 182700-32-9P 182700-33-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Badger; US 5900430 A 1999 HCAPLUS

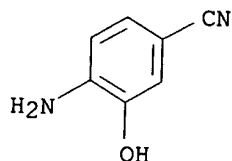
IT **55586-26-0P**, 2-Amino-5-cyanophenol

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(prepn. of N,N'-diphenyl ureas as IL-8 receptor antagonists)

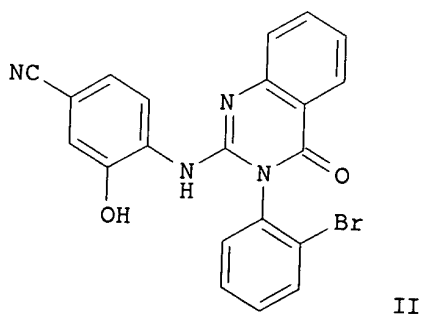
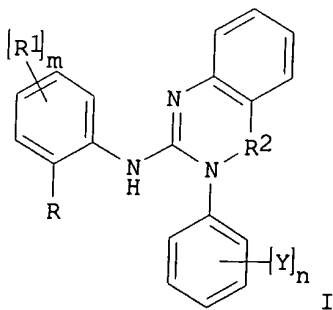
RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 14 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2000:861661 HCAPLUS
 DN 134:29427
 TI Preparation of novel guanidine compounds as IL-8 receptor antagonists
 IN Palovich, Michael R.; Widdowson, Katherine L.
 PA Smithkline Beecham Corporation, USA
 SO PCT Int. Appl., 33 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07D239-72
 ICS A61K031-517; A61P009-10; A61P011-06; A61P029-02
 CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2000073282 | A1 | 20001207 | WO 2000-US14659 | 20000526 |
| W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, DZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRAI US 1999-136667P | P | 19990528 | | |
| OS MARPAT 134:29427 | | | | |
| GI | | | | |



AB The title compds. [I; R = OH, SH, NHSO₂R₃ (R₃ = (un)substituted NH₂, alkyl, arylalkyl, etc.); R₁ = H, halo, NO₂, etc.; R₂ = CO, SO, SO₂, C(NH); Y = H, halo, NO₂, etc.; n = 1-3; m = 1-3], useful in the treatment of disease states mediated by the chemokine, Interleukin-8 (IL-8), were

prepd. E.g., a multi-step synthesis of quinazoline II was given. All the exemplified compds. I showed IC50 from about 45 to about <1 .mu.g/mL in the permissive models for IL-8 receptor inhibition. Some of the tested compds. I were also found to be inhibitors of Gro-.alpha. binding at about the same level.

ST guanidine prepn interleukin chemokine groalpha inhibitor
IT Interleukin 8 receptors

Melanoma growth-stimulating activity-.alpha.

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)

(prepn. of novel guanidine compds. IL-8 receptor antagonists)

IT 311346-36-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of novel guanidine compds. IL-8 receptor antagonists)

IT 59-49-4, 2(3H)-Benzoxazolone 87-25-2, Ethyl anthranilate 13037-60-0, 2-Bromophenyl isothiocyanate

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of novel guanidine compds. IL-8 receptor antagonists)

IT 19932-85-5P **55586-26-0P** 98556-62-8P 260053-67-6P
311311-26-9P 311311-27-0P 311311-28-1P 311311-29-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of novel guanidine compds. IL-8 receptor antagonists)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Bereznak; US 5747497 A 1998 HCAPLUS

(2) E I Dupont de Nemours And Company; WO 9702262 A1 1997 HCAPLUS

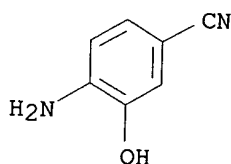
IT **55586-26-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of novel guanidine compds. IL-8 receptor antagonists)

RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 15 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:861490 HCAPLUS

DN 134:25357

TI Phenyl urea IL-8 receptor antagonists for therapeutic use

IN Palovich, Michael R.; Widdowson, Katherine L.

PA Smithkline Beecham Corporation, USA

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-4168

ICS A61K031-4188; A61K031-437; C07D233-50; C07D235-02; C07D471-14;

C07D487-14; C07D513-04
 CC 1-7 (Pharmacology)
 Section cross-reference(s): 27, 28, 63
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2000072845 | A1 | 20001207 | WO 2000-US14661 | 20000526 |
| | W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, DZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, MZ, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | BR 2000010843 | A | 20020219 | BR 2000-10843 | 20000526 |
| | EP 1180028 | A1 | 20020220 | EP 2000-936369 | 20000526 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | JP 2003500447 | T2 | 20030107 | JP 2000-620957 | 20000526 |
| | US 6566387 | B1 | 20030520 | US 2001-9212 | 20011108 |
| | ZA 2001009628 | A | 20021122 | ZA 2001-9628 | 20011122 |
| | NO 2001005775 | A | 20011127 | NO 2001-5775 | 20011127 |
| PRAI | US 1999-136717P | P | 19990528 | | |
| | WO 2000-US14661 | W | 20000526 | | |
| OS | MARPAT 134:25357 | | | | |
| AB | The invention discloses the use of Ph ureas in the treatment of disease states mediated by the chemokine, Interleukin-8 (IL-8). Prepn. of compds. of the invention is described. | | | | |
| ST | phenyl urea prepn therapeutic interleukin 8 disease | | | | |
| IT | Chemokine receptors | | | | |
| | RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) | | | | |
| | (CXCR1; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT | Chemokine receptors | | | | |
| | RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) | | | | |
| | (CXCR2; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT | Intestine, disease | | | | |
| | (Crohn's; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT | Sepsis | | | | |
| | (Gram-neg.; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT | mRNA | | | | |
| | RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) | | | | |
| | (TNF-.alpha. and IL-1.beta.; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT | Respiratory distress syndrome | | | | |
| | (adult; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT | Transplant rejection | | | | |
| | (allotransplant; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT | Antiarteriosclerotics | | | | |
| | (antiatherosclerotics; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT | Dermatitis | | | | |
| | (atopic; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT | Lung, disease | | | | |
| | (chronic obstructive; phenylurea IL-8 receptor antagonists for | | | | |

therapeutic use)
IT Brain
(cortex; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Drugs
(gastrointestinal; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Gingiva
(gingivitis; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Kidney, disease
(glomerulonephritis; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Transplant and Transplantation
(graft-vs.-host reaction; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Brain
(hippocampus; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Intestine, disease
(inflammatory; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Reperfusion
(injury, cardiac and renal; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Angiogenesis
Angiogenesis inhibitors
Anti-Alzheimer's agents
Anti-inflammatory agents
Antiarthritics
Antiasthmatics
Cardiovascular agents
Drug delivery systems
Malaria
Psoriasis
Thrombosis
(phenylurea IL-8 receptor antagonists for therapeutic use)
IT Chemokines
Interleukin 1.beta.
Interleukin 8
Tumor necrosis factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(phenylurea IL-8 receptor antagonists for therapeutic use)
IT Heart, disease
Kidney, disease
(reperfusion injury; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Artery, disease
(restenosis; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Shock (circulatory collapse)
(septic; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Hematopoietic precursor cell
(stem, undesired release; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Brain, disease
(stroke; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Osteoporosis
(therapeutic agents; phenylurea IL-8 receptor antagonists for therapeutic use)
IT Shock (circulatory collapse)

(toxic shock syndrome; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Brain, disease
(trauma; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Intestine, disease
(ulcerative colitis; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Interleukin 8 receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.alpha.; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Interleukin 8 receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.beta.; phenylurea IL-8 receptor antagonists for therapeutic use)

IT 311319-98-9P 311319-99-0P 311320-00-0P 311320-01-1P 311320-07-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(phenylurea IL-8 receptor antagonists for therapeutic use)

IT 311320-02-2 311320-03-3 311320-04-4 311320-05-5 311320-06-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(phenylurea IL-8 receptor antagonists for therapeutic use)

IT 19932-85-5P **55586-26-0P** 98556-62-8P 260053-67-6P
311311-26-9P 311311-27-0P 311311-28-1P 311311-29-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction; phenylurea IL-8 receptor antagonists for therapeutic use)

IT 59-49-4, 2(3H)-Benzoxazolone 1592-00-3, 2-Bromophenylisocyanate
6436-90-4, N-Benzylglycine ethyl ester 16652-71-4, L-Proline benzyl ester hydrochloride 18162-48-6 24424-99-5, BOC anhydride 32559-18-5, Methyl pipercolinate hydrochloride 40216-83-9 65365-28-8, D-Proline methyl ester hydrochloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; phenylurea IL-8 receptor antagonists for therapeutic use)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

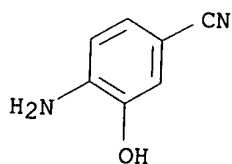
RE

(1) Smithkline Beecham Corporation; WO 0035442 A1 2000 HCAPLUS

IT **55586-26-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction; phenylurea IL-8 receptor antagonists for therapeutic use)

RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 16 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:861485 HCAPLUS
DN 134:25356
TI Phenyl urea IL-8 receptor antagonists for therapeutic use
IN Palovich, Michael R.; Widdowson, Katherine L.
PA Smithkline Beecham Corporation, USA
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-155
ICS A61K031-4168; A61K031-433; A61P009-10; A61P011-06; A61P013-12;
C07C279-18; C07D233-04; C07D233-54; C07D271-10; C07D285-135
CC 1-7 (Pharmacology)
Section cross-reference(s): 25, 28, 63
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI WO 2000072840 | A1 | 20001207 | WO 2000-US14660 | 20000526 |
| W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, DZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| BR 2000010863 | A | 20020219 | BR 2000-10863 | 20000526 |
| EP 1180025 | A1 | 20020220 | EP 2000-936368 | 20000526 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2003500443 | T2 | 20030107 | JP 2000-620952 | 20000526 |
| ZA 2001009267 | A | 20021128 | ZA 2001-9267 | 20011122 |
| NO 2001005774 | A | 20011127 | NO 2001-5774 | 20011127 |
| PRAI US 1999-136665P | P | 19990528 | | |
| WO 2000-US14660 | W | 20000526 | | |
| OS MARPAT 134:25356 | | | | |
| AB The invention discloses the use of Ph ureas in the treatment of disease states mediated by the chemokine, Interleukin-8 (IL-8). Prepn. of compds. of the invention is described. | | | | |
| ST phenyl urea prepn therapeutic interleukin 8 disease | | | | |
| IT Chemokine receptors | | | | |
| RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) | | | | |
| (CXCR1; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT Chemokine receptors | | | | |
| RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) | | | | |
| (CXCR2; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT Intestine, disease | | | | |
| (Crohn's; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT Sepsis | | | | |
| (Gram-neg.; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |
| IT mRNA | | | | |
| RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) | | | | |
| (TNF-.alpha. and IL-1.beta.; phenylurea IL-8 receptor antagonists for therapeutic use) | | | | |

- IT Respiratory distress syndrome
(adult; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Transplant rejection
(allotransplant; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Antiarteriosclerotics
(antiatherosclerotics; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Dermatitis
(atopic; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Lung, disease
(chronic obstructive; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Brain
(cortex; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Drugs
(gastrointestinal; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Gingiva
(gingivitis; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Kidney, disease
(glomerulonephritis; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Transplant and Transplantation
(graft-vs.-host reaction; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Brain
(hippocampus; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Intestine, disease
(inflammatory; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Reperfusion
(injury, cardiac and renal; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Angiogenesis
Angiogenesis inhibitors
Anti-Alzheimer's agents
Anti-inflammatory agents
Antiarthritics
Antiasthmatics
Cardiovascular agents
Drug delivery systems
Malaria
Psoriasis
Thrombosis
(phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Chemokines
Interleukin 1.beta.
Interleukin 8
Tumor necrosis factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Heart, disease
Kidney, disease
(reperfusion injury; phenylurea IL-8 receptor antagonists for therapeutic use)
- IT Artery, disease

(restenosis; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Shock (circulatory collapse)
(septic; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Hematopoietic precursor cell
(stem, undesired release; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Brain, disease
(stroke; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Osteoporosis
(therapeutic agents; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Shock (circulatory collapse)
(toxic shock syndrome; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Brain, disease
(trauma; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Intestine, disease
(ulcerative colitis; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Interleukin 8 receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.alpha.; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Interleukin 8 receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.beta.; phenylurea IL-8 receptor antagonists for therapeutic use)

IT 311311-10-1P 311311-11-2P 311311-12-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(phenylurea IL-8 receptor antagonists for therapeutic use)

IT 311311-09-8P 311311-13-4P 311311-14-5P 311311-15-6P 311311-25-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(phenylurea IL-8 receptor antagonists for therapeutic use)

IT 311311-16-7 311311-17-8 311311-18-9 311311-19-0 311311-20-3
311311-21-4 311311-22-5 311311-23-6 311311-24-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(phenylurea IL-8 receptor antagonists for therapeutic use)

IT 19932-85-5P **55586-26-0P** 98556-62-8P 260053-67-6P
311311-26-9P 311311-27-0P 311311-28-1P 311311-29-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction; phenylurea IL-8 receptor antagonists for therapeutic use)

IT 59-49-4, 2(3H)-Benzoxazolone 141-43-5, Ethanolamine, reactions
623-33-6, Glycine ethyl ester hydrochloride 13037-60-0,
2-Bromophenylisothiocyanate 18162-48-6 21335-43-3,
Chloromethylsulfonamide 22483-09-6, 2,2-Dimethoxyethylamine
24424-99-5, BOC anhydride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; phenylurea IL-8 receptor antagonists for therapeutic use)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

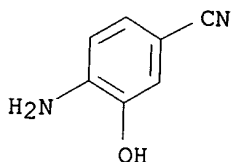
- (1) Douglas; US 3914306 A 1975 HCAPLUS
- (2) Meis; US 1953494 A 1934 HCAPLUS
- (3) Ruettimann; US 5696290 A 1997 HCAPLUS
- (4) Seifert; US 605977 A 1898

IT 55586-26-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and reaction; phenylurea IL-8 receptor antagonists for therapeutic use)

RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 17 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:861450 HCAPLUS

DN 134:25355

TI Phenyl urea IL-8 receptor antagonists for therapeutic use

IN Palovich, Michael R.; Widdowson, Katherine L.

PA Smithkline Beecham Corporation, USA

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K

CC 1-7 (Pharmacology)

Section cross-reference(s): 25, 27, 63

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | WO 2000072800 | A2 | 20001207 | WO 2000-US14655 | 20000526 |
| | WO 2000072800 | A3 | 20010308 | | |
| | W: CA, JP, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |

PRAI US 1999-136666P P 19990528

OS MARPAT 134:25355

AB The invention discloses the use of Ph ureas in the treatment of disease states mediated by the chemokine, Interleukin-8 (IL-8). Prepn. of compds. of the invention is described.

ST phenyl urea prepn therapeutic interleukin 8 disease

IT Chemokine receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(CXCR1; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Chemokine receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(CXCR2; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Intestine, disease
(Crohn's; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Sepsis
(Gram-neg.; phenylurea IL-8 receptor antagonists for therapeutic use)

IT mRNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(TNF-.alpha. and IL-1.beta.; phenylurea IL-8 receptor antagonists for
therapeutic use)

IT Respiratory distress syndrome
(adult; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Transplant rejection
(allotransplant; phenylurea IL-8 receptor antagonists for therapeutic
use)

IT Antiarteriosclerotics
(antiatherosclerotics; phenylurea IL-8 receptor antagonists for
therapeutic use)

IT Dermatitis
(atopic; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Lung, disease
(chronic obstructive; phenylurea IL-8 receptor antagonists for
therapeutic use)

IT Brain
(cortex; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Drugs
(gastrointestinal; phenylurea IL-8 receptor antagonists for therapeutic
use)

IT Gingiva
(gingivitis; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Kidney, disease
(glomerulonephritis; phenylurea IL-8 receptor antagonists for
therapeutic use)

IT Transplant and Transplantation
(graft-vs.-host reaction; phenylurea IL-8 receptor antagonists for
therapeutic use)

IT Brain
(hippocampus; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Intestine, disease
(inflammatory; phenylurea IL-8 receptor antagonists for therapeutic
use)

IT Reperfusion
(injury, cardiac and renal; phenylurea IL-8 receptor antagonists for
therapeutic use)

IT Angiogenesis
Angiogenesis inhibitors
Anti-Alzheimer's agents
Anti-inflammatory agents
Antiarthritics
Antiasthmatics
Cardiovascular agents
Drug delivery systems
Malaria
Psoriasis
Thrombosis
(phenylurea IL-8 receptor antagonists for therapeutic use)

IT Chemokines
Interleukin 1.beta.
Interleukin 8

Tumor necrosis factors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (phenylurea IL-8 receptor antagonists for therapeutic use)

IT Heart, disease
 Kidney, disease
 (reperfusion injury; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Artery, disease
 (restenosis; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Shock (circulatory collapse)
 (septic; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Hematopoietic precursor cell
 (stem, undesired release; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Brain, disease
 (stroke; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Osteoporosis
 (therapeutic agents; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Shock (circulatory collapse)
 (toxic shock syndrome; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Brain, disease
 (trauma; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Intestine, disease
 (ulcerative colitis; phenylurea IL-8 receptor antagonists for therapeutic use)

IT Interleukin 8 receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (.alpha.; phenylurea IL-8 receptor antagonists for therapeutic use)

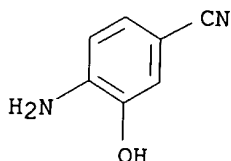
IT Interleukin 8 receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (.beta.; phenylurea IL-8 receptor antagonists for therapeutic use)

IT 103-49-1P, Dibenzylamine 311311-88-3P 311311-89-4P 311311-90-7P
 311311-91-8P 311311-92-9P 311311-93-0P 311311-94-1P 311311-95-2P
 311311-96-3P 311311-97-4P 311311-98-5P 311311-99-6P 311312-00-2P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (phenylurea IL-8 receptor antagonists for therapeutic use)

IT 19932-85-5P **55586-26-0P** 98556-62-8P 260053-67-6P
 311311-26-9P 311311-27-0P 311311-28-1P 311311-29-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. and reaction; phenylurea IL-8 receptor antagonists for therapeutic use)

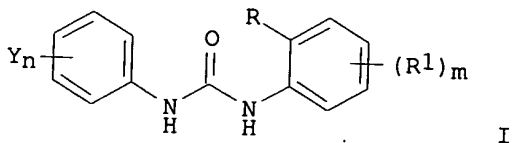
IT 59-49-4, 2(3H)-Benzoxazolone 100-61-8, reactions 108-18-9,
 Diisopropylamine 109-89-7, Diethylamine, reactions 110-89-4,
 Piperidine, reactions 123-75-1, Pyrrolidine, reactions 142-25-6,
 N,N,N'-Trimethylethylenediamine 306-37-6, N,N'-Dimethylhydrazine
 dihydrochloride 3433-37-2, 2-Hydroxymethylpiperidine 4543-96-8,
 N,N,N'-Trimethyl-1,3-diaminopropane 6638-79-5 13037-60-0,
 2-Bromophenylisothiocyanate 18162-48-6 24424-99-5, BOC anhydride
 60717-51-3 81310-55-6
 RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction; phenylurea IL-8 receptor antagonists for therapeutic use)
 IT 55586-26-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and reaction; phenylurea IL-8 receptor antagonists for
 therapeutic use)
 RN 55586-26-0 HCAPLUS
 CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



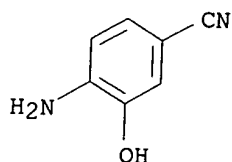
L13 ANSWER 18 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 2000:161249 HCAPLUS
 DN 132:194197
 TI Preparation of 3-hydroxy-4-amino-benzonitrile and urea derivatives
 thereof.
 IN Baine, Neil H.; Clark, William M. Jr.; Eldridge, Ann Marie
 PA Smithkline Beecham Corporation, USA
 SO PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07C273-02
 ICS C07C275-28; C07C255-49; C07D213-02; C07D263-54
 CC 25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 2000012468 | A1 | 20000309 | WO 1999-US19492 | 19990826 |
| | W: CA, JP, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | CA 2341718 | AA | 20000309 | CA 1999-2341718 | 19990826 |
| | EP 1107948 | A1 | 20010620 | EP 1999-943936 | 19990826 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2002523487 | T2 | 20020730 | JP 2000-567502 | 19990826 |
| PRAI | US 1998-98249P | P | 19980828 | | |
| | WO 1999-US19492 | W | 19990826 | | |
| OS | CASREACT 132:194197; MARPAT 132:194197 | | | | |
| GI | | | | | |



I

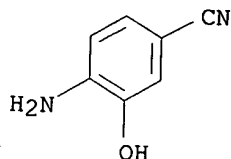
- AB Ureas [I; R = moiety having an ionizable H and $pK_a < 10$; R1, Y = H, halo, NO2, cyano, alkyl, haloalkyl, alkenyl, alkoxy, haloalkoxy, N3, OH, aralkyl, aralkenyl, aryloxy, etc.; m = 0-3; n undefined], were prepd. by contacting hydroxyanilines (II; A = acid moiety) with an isocyanate in the presence of about 1 equiv. org. base. Thus, 4-amino-3-hydroxybenzonitrile.TFA (prepn. given) and piperidine in MeCN were treated with 2-bromophenyl isocyanate to give 63% N-(2-bromophenyl)-N'-(2-hydroxy-4-cyanophenyl)urea.
- ST hydroxyaminobenzonitrile prepn reaction; arylurea prepn; urea hydroxycyanophenyl bromophenyl prepn
- IT Nitriles, preparation
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (arom.; prepn. of 3-hydroxy-4-amino-benzonitrile and urea derivs. thereof)
- IT 57-13-6P, Urea, preparation
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (diaryl derivs; prepn. of 3-hydroxy-4-amino-benzonitrile and urea derivs. thereof)
- IT **55586-26-0DP, salts 98556-62-8P 260053-68-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of 3-hydroxy-4-amino-benzonitrile and urea derivs. thereof)
- IT 182499-07-6P 182499-37-2P 260044-22-2P 260044-23-3P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (prepn. of 3-hydroxy-4-amino-benzonitrile and urea derivs. thereof)
- IT 59-49-4, 2(3H)-Benzoxazolone 1592-00-3, 2-Bromophenyl isocyanate 19932-84-4 19932-87-7 260053-67-6
RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of 3-hydroxy-4-amino-benzonitrile and urea derivs. thereof)
- IT 19932-85-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of 3-hydroxy-4-amino-benzonitrile and urea derivs. thereof)
- RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
- RE
- (1) Easson, A; The Search for Chemotherapeutic Amidines Part XVIII 1961, P1029 HCAPLUS
- (2) Murase; US 4457872 A 1984 HCAPLUS
- (3) Widdowson; US 5886044 A 1999 HCAPLUS
- IT **55586-26-0DP, salts 260053-68-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of 3-hydroxy-4-amino-benzonitrile and urea derivs. thereof)
- RN 55586-26-0 HCAPLUS
- CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



RN 260053-68-7 HCAPLUS
CN Benzonitrile, 4-amino-3-hydroxy-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

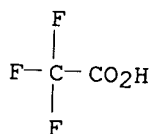
CM 1

CRN 55586-26-0
CMF C7 H6 N2 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2



L13 ANSWER 19 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:161242 HCAPLUS
DN 132:180375
TI Process for making 2-amino-5-cyanophenol
IN Labaw, Clifford S.; Shilcrat, Susan C.
PA Smithkline Beecham Corporation, USA
SO PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07C211-45
ICS C07C215-56; C07C255-50
CC 25-20 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2000012461 | A1 | 20000309 | WO 1999-US19494 | 19990826 |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| CA 2341711 | AA | 20000309 | CA 1999-2341711 | 19990826 |
| EP 1107943 | A1 | 20010620 | EP 1999-943937 | 19990826 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |

JP 2003525856 T2 20030902 JP 2000-567496 19990826
 PRAI US 1998-98335P P 19980828
 WO 1999-US19494 W 19990826

OS CASREACT 132:180375

AB This invention relates to a process for prepg. 2-amino-5-cyanophenol which comprises bromination of o-anisidine followed by cyanation of the resulting 2-methoxy-4-bromoaniline, and demethylation of 2-methoxy-4-cyanoaniline. The title compd. is useful for making certain Ph urea compds.

ST aminocyanophenol prepn manufg

IT 59557-91-4P 177476-76-5P 259547-35-8P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (process for making 2-amino-5-cyanophenol)

IT 55586-26-0P, 2-Amino-5-cyanophenol

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (process for making 2-amino-5-cyanophenol)

IT 90-04-0, o-Anisidine 615-36-1, 2-Bromoaniline

RL: RCT (Reactant); RACT (Reactant or reagent) (process for making 2-amino-5-cyanophenol)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Benton; J Amer Chem Soc 1942, V64, P1128 HCAPLUS

(2) Fraser; J Org Chem 1976, V41, P170-171 HCAPLUS

(3) Newman; J Amer Cham Soc 1976, V98(11), P3237 HCAPLUS

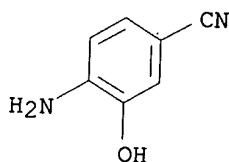
(4) Newman, M; .alpha.-Naphthonitrile Org Syn Col 1955, V3, 6, and 8, P212

IT 55586-26-0P, 2-Amino-5-cyanophenol

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (process for making 2-amino-5-cyanophenol)

RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 20 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1999:511161 HCAPLUS
 DN 131:153732
 TI Synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents
 PA Board of Regents, the University of Texas System, USA
 SO PCT Int. Appl., 84 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07D498-00
 CC 1-6 (Pharmacology)
 Section cross-reference(s): 3, 28
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9940093 | A2 | 19990812 | WO 1999-US2400 | 19990204 |
| | WO 9940093 | A3 | 20000127 | | |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9926574 | A1 | 19990823 | AU 1999-26574 | 19990204 |
| | US 6528517 | B1 | 20030304 | US 1999-245019 | 19990204 |
| PRAI | US 1998-73658P | P | 19980204 | | |
| | WO 1999-US2400 | W | 19990204 | | |
| OS | CASREACT 131:153732; MARPAT 131:153732 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention discloses a novel quinobenzoxazine self-assembly complex on DNA and on the topoisomerase II-DNA complex. The related model is used to design and synthesize a new series of quinobenzoxazines, pyridobenzophenoxazines, pyridonaphthophenoxazines, and other related compds. (I) [m, m', n, n' = independently 0, 1, 2; A = O, S, C; B, C = independently N, O, S, C, CH, CH₂; X = H or halo; W = H, NO₂, NH₂, alkyl amino, haloalkyl, or halo; Z = halo or N-contg. C1-6 group; R1 = H or carboxy-protecting group; R2 = H, halo, C1-6 alkyl] that may exhibit anticancer or antibiotic activity. Thus, Et 2,3,4,5-tetrafluorobenzoylacetate was loaded on a solid support resin by transesterification and refluxed in toluene in the presence of catalytic amts. of DMAP to form the solid-bound .beta.-ketoester. The ester was treated with DMF di-Me acetal followed by 2-aminophenol in the presence of pyridine to generate the resin-bound enaminketoester. The product was cyclized and further derivatized in three steps to yield 1-(S)-(3-aminopyrrolidin-1-yl)-2-fluoro-4-oxo-4H-pyrido[3,2,1-k,1]phenoxazine-5-carboxylic acid TFA salt (II.CF₃CO₂H). The anticancer activity of these compds. is thought to operate via stabilization of the topoisomerase II-DNA complex and/or interaction with G-quadruplexes, while the antibiotic activity of these compds. derives from their ability to inhibit gyrase, the bacterial type II topoisomerase. Decatenation inhibition, DNA unwinding, and cytotoxicity data for selected pyridobenzophenoxazines were given. For example, topoisomerase II inhibition was reported with IC₅₀ values ranging from 0.22 to 1.84 .mu.M.

ST quinobenzoxazine pyridobenzophenoxazine pyridonaphthophenoxazine antibiotic anticancer prepn; G quadruplex interaction compd; topoisomerase II DNA gyrase inhibition

IT Structure-activity relationship
 (DNA topoisomerase II-inhibiting; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)

IT Intestine, neoplasm
 Intestine, neoplasm
 (colon, inhibitors; synthesis of quinobenzoxazine analogs with

- topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT Antitumor agents
(colon; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT Antitumor agents
(lung non-small-cell carcinoma; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT Antitumor agents
(lymphoma; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT Antitumor agents
(mammary gland; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT Antitumor agents
(melanoma; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT Mammary gland
Mammary gland
Prostate gland
Prostate gland
(neoplasm, inhibitors; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT Lung, neoplasm
Lung, neoplasm
(non-small-cell carcinoma, inhibitors; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT Antitumor agents
(prostate gland; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT Antibiotics
Antitumor agents
(synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT 142805-56-9, Topoisomerase II
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(inhibition; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT 99735-29-2DP, resin-supported ester 216501-07-4P 216501-08-5P
216501-10-9P 216501-14-3P 216501-16-5P 216501-18-7P 216501-20-1P
216501-22-3P 216501-24-5P 237425-14-8DP, resin-supported ester
237425-15-9DP, resin-supported ester 237425-16-0DP, resin-supported ester 237425-18-2P 237425-19-3P 237425-20-6P 237425-21-7P
237425-22-8P 237425-23-9P 237425-24-0P 237425-25-1P 237425-26-2P
237425-27-3P 237425-28-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; synthesis of quinobenzoxazine analogs with topoisomerase II and quadruplex interactions for use as antineoplastic agents)
- IT 95-55-6, 2-Aminophenol 606-41-7, 2-Amino-1-naphthol 1198-27-2, 1-Amino-2-naphthol hydrochloride 2033-24-1, 2,2-Dimethyl-1,3-dioxane-4,6-dione 2834-92-6, 1-Amino-2-naphthol 5417-63-0, 3-Amino-2-naphthol

9003-53-6D, Polystyrene, Wang resin 56432-31-6 57260-71-6, tert-Butyl
1-piperazinecarboxylate 94695-48-4, 2,3,4,5-Tetrafluorobenzoyl chloride
94695-50-8, Ethyl 2,3,4,5-tetrafluorobenzoylacetate 99724-19-3
237425-29-5 237425-30-8 237425-31-9 237425-32-0
237425-35-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; synthesis of quinobenzoxazine analogs with topoisomerase II
and quadruplex interactions for use as antineoplastic agents)

IT 216501-43-8P 216501-45-0P 216501-47-2P 237424-87-2P 237424-89-4P
237424-91-8P 237424-93-0P 237424-95-2P 237424-97-4P 237424-99-6P
237425-00-2P 237425-01-3P 237425-02-4P 237425-03-5P 237425-04-6P
237425-06-8P 237425-07-9P 237425-08-0P 237425-09-1P 237425-10-4P
237425-11-5P 237425-13-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of quinobenzoxazine analogs with topoisomerase II and
quadruplex interactions for use as antineoplastic agents)

IT 70458-96-7, Norfloxacin 155035-57-7 216501-12-1 216501-27-8
216501-29-0 216501-31-4 216501-33-6 216501-35-8 216501-37-0
216501-39-2 216501-41-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)

(synthesis of quinobenzoxazine analogs with topoisomerase II and
quadruplex interactions for use as antineoplastic agents)

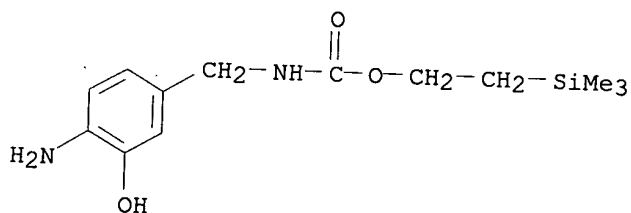
IT **237425-29-5**

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; synthesis of quinobenzoxazine analogs with topoisomerase II
and quadruplex interactions for use as antineoplastic agents)

RN 237425-29-5 HCAPLUS

CN Carbamic acid, [(4-amino-3-hydroxyphenyl)methyl]-, 2-(trimethylsilyl)ethyl
ester (9CI) (CA INDEX NAME)



L13 ANSWER 21 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:205323 HCAPLUS
DN 130:267221
TI Preparation of phenylureas as IL-8 receptor antagonists
IN Widdowson, Katherine Louisa; Veber, Daniel Frank; Jurewicz, Anthony
Joseph; Hertzberg, Robert Phillip; Rutledge, Melvin Clarence, Jr.
PA Smithkline Beecham Corporation, USA
SO U.S., 43 pp., Cont.-in-part of U.S. Ser. No. 390,260, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K031-17

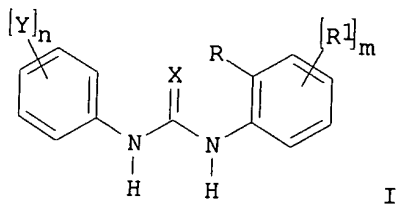
KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

NCL 514596000

CC 25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1

FAN.CNT 4

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | US 5886044 | A | 19990323 | US 1996-641990 | 19960320 |
| | US 5780483 | A | 19980714 | US 1996-701299 | 19960821 |
| | US 6211373 | B1 | 20010403 | US 1998-111663 | 19980708 |
| | US 6262113 | B1 | 20010717 | US 1998-125279 | 19980814 |
| | US 6180675 | B1 | 20010130 | US 1999-240354 | 19990129 |
| PRAI | US 1995-390260 | B2 | 19950217 | | |
| | WO 1996-US2260 | W | 19960216 | | |
| | US 1996-641990 | A2 | 19960320 | | |
| | US 1996-701299 | A3 | 19960821 | | |
| | WO 1996-US13632 | W | 19960821 | | |
| OS | MARPAT 130:267221 | | | | |
| GI | | | | | |



AB The title compds. [I; X = O, S; R = OH; R1 = H, halo, NO2, etc.; Y = H, halo, CN, etc.; n = 1-3; m = 1-3], useful in the treatment of disease states mediated by the chemokine, interleukin-8 (IL-8), such as psoriasis, atopic dermatitis, asthma, chronic obstructive pulmonary disease, ARDS, arthritis, inflammatory bowel disease, Crohn's disease, ulcerative colitis, septic shock, toxic shock syndrome, stroke, cardiac and renal reperfusion injury, restenosis, angiogenesis, glomerulonephritis, thrombosis, Alzheimer's disease, graft vs. host reaction, allograft rejection, etc., were prepd. E.g., reaction of Me 4-amino-3-hydroxybenzoate with Ph isocyanate afforded 90% I [R = OH; R1 = 4-(MeOCO); Y = H; m = 1]. All exemplified compds. I showed IC50 from 45 to <1 .mu./mL for IL-8 receptor inhibition. Compds. I were also found to be inhibitors of Gro-.alpha. binding at about the same level.

ST phenylurea prepn interleukin 8 antagonist; psoriasis phenylurea prepn; atopic dermatitis phenylurea prepn; antiasthmatic phenylurea prepn; chronic obstructive pulmonary disease phenylurea prepn; antiarthritic phenylurea prepn; inflammatory bowel disease phenylurea prepn; Crohn's disease phenylurea prepn; ulcerative colitis phenylurea prepn; septic shock phenylurea prepn; toxic shock syndrome phenylurea prepn; stroke phenylurea prepn; reperfusion injury cardiac renal phenylurea prepn; restenosis phenylurea prepn; angiogenesis phenylurea prepn; glomerulonephritis phenylurea prepn; antithrombotic phenylurea prepn; Alzheimer's disease phenylurea prepn; graft versus host reaction phenylurea prepn; allograft rejection phenylurea prepn; gro alpha chemokine inhibitor phenylurea prepn; MGSA chemokine inhibitor phenylurea prepn

IT Chemokine receptors

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL

- (Biological study)
- (CXCR1; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Chemokine receptors
- RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
- (Biological study)
- (CXCR2; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Intestine, disease
- (Crohn's, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Respiratory distress syndrome
- (adult, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Transplant rejection
- (allotransplant, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Dermatitis
- (atopic, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Lung, disease
- (chronic obstructive, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Kidney, disease
- (glomerulonephritis, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Transplant and Transplantation
- (graft-vs.-host reaction, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Intestine, disease
- (inflammatory, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Melanoma growth-stimulating activity-.alpha.
- RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
- (Biological study)
- (inhibitors of Gro-.alpha. binding; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Reperfusion
- (injury, treatment of cardiac and renal reperfusion injury; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Antiarthritics
- Antiasthmatics
- Anticoagulants
- (prepn. of phenylureas as IL-8 receptor antagonists)
- IT Artery, disease
- (restenosis, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Shock (circulatory collapse)
- (septic, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Brain, disease
- (stroke, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Shock (circulatory collapse)
- (toxic shock syndrome, treatment of; prepn. of phenylureas as IL-8 receptor antagonists)
- IT Alzheimer's disease
- Angiogenesis
- Psoriasis
- (treatment of; prepn. of phenylureas as IL-8 receptor antagonists)

IT Intestine, disease
(ulcerative colitis, treatment of; prepn. of phenylureas as IL-8
receptor antagonists)

IT Interleukin 8 receptors
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
(Biological study)
(.alpha.; prepn. of phenylureas as IL-8 receptor antagonists)

IT Interleukin 8 receptors
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
(Biological study)
(.beta.; prepn. of phenylureas as IL-8 receptor antagonists)

IT 160383-79-9P 182497-99-0P 182498-79-9P 182498-99-3P 182499-02-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
(Reactant or reagent); USES (Uses)
(prepn. of phenylureas as IL-8 receptor antagonists)

IT 25751-87-5P 85915-46-4P 88846-90-6P 92949-89-8P 117745-32-1P
160383-78-8P 182498-03-9P 182498-07-3P 182498-11-9P 182498-15-3P
182498-18-6P 182498-20-0P 182498-22-2P 182498-25-5P 182498-26-6P
182498-28-8P 182498-30-2P 182498-31-3P 182498-32-4P 182498-33-5P
182498-34-6P 182498-35-7P 182498-38-0P 182498-40-4P 182498-42-6P
182498-44-8P 182498-45-9P 182498-46-0P 182498-47-1P 182498-48-2P
182498-50-6P 182498-52-8P 182498-54-0P 182498-55-1P 182498-57-3P
182498-59-5P 182498-62-0P 182498-63-1P 182498-64-2P 182498-66-4P
182498-67-5P 182498-68-6P 182498-69-7P 182498-70-0P 182498-71-1P
182498-72-2P 182498-73-3P 182498-74-4P 182498-75-5P 182498-76-6P
182498-77-7P 182498-78-8P 182498-80-2P 182498-81-3P 182498-82-4P
182498-83-5P 182498-84-6P 182498-85-7P 182498-86-8P 182498-87-9P
182498-88-0P 182498-89-1P 182498-90-4P 182498-91-5P 182498-92-6P
182498-93-7P 182498-94-8P 182498-95-9P 182498-96-0P 182498-97-1P
182498-98-2P 182499-00-9P 182499-01-0P 182499-03-2P 182499-04-3P
182499-05-4P 182499-06-5P 182499-07-6P 182499-08-7P 182499-09-8P
182499-10-1P 182499-11-2P 182499-12-3P 182499-13-4P 182499-14-5P
182499-15-6P 182499-16-7P 182499-17-8P 182499-18-9P 182499-19-0P
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182499-26-9P 182499-27-0P 182499-28-1P 182499-29-2P 182499-30-5P
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182499-56-5P 182499-57-6P 182499-58-7P 182499-59-8P 182499-60-1P
182499-61-2P 182499-62-3P 182499-63-4P 182499-64-5P 182499-65-6P
182499-66-7P 182499-67-8P 182499-68-9P 182499-69-0P 182499-70-3P
182499-71-4P 182499-72-5P 182501-57-1P 182700-31-8P 222172-42-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenylureas as IL-8 receptor antagonists)

IT 62-53-3, Aniline, reactions 86-84-0, 1-Naphthyl isocyanate 87-17-2,
2-Phenylaminocarbonylphenol 88-67-5, 2-Iodobenzoic acid 90-43-7,
2-Phenylphenol 91-93-0 95-54-5, 1,2-Benzenediamine, reactions
95-55-6, 2-Aminophenol 98-09-9, Phenylsulfonyl chloride 98-17-9
99-56-9, 4-Nitro-1,2-phenylenediamine 99-57-0, 5-Nitro-2-hydroxyaniline
100-46-9, Benzylamine, reactions 103-71-9, Phenyl isocyanate, reactions
106-40-1, 4-Bromoaniline 116-63-2 117-77-1, 2-Hydroxy-3-
aminoanthraquinone 117-99-7 121-51-7, 3-Nitrobenzenesulfonyl chloride

121-60-8, 4-Acetamidophenylsulfonyl chloride 121-88-0,
2-Amino-5-nitrophenol 137-07-5, 2-Aminothiophenol 274-09-9,
1,3-Benzodioxole 320-76-3 329-01-1, 3-Trifluoromethylphenyl isocyanate
385-01-3, 2-Nitro-3-fluorophenol 394-31-0, 2-Amino-5-hydroxybenzoic acid
394-33-2, 4-Fluoro-2-nitrophenol 400-98-6, 4-Amino-3-
nitrobenzotrifluoride 400-99-7, 4-Trifluoromethyl-2-nitrophenol
444-30-4, 2-Trifluoromethylphenol 446-36-6, 5-Fluoro-2-nitrophenol
534-85-0, 2-Anilinoaniline 570-23-0, 2-Hydroxy-3-aminobenzoic acid
576-24-9, 2,3-Dichlorophenol 580-51-8, 3-Phenylphenol 583-17-5,
2-Hydroxycinnamic acid 588-30-7, 3-Hydroxycinnamic acid 603-87-2,
2-Hydroxy-3-nitroaniline 609-89-2, 4,6-Dichloro-2-nitrophenol
611-20-1, 2-Cyanophenol 614-68-6, 2-Methylphenyl isocyanate 615-36-1,
2-Bromoaniline 618-45-1, 3-Isopropylphenol 620-17-7, 3-Ethylphenol
644-35-9, 2-n-Propylphenol 700-38-9, 2-Nitro-5-methylphenol 700-87-8,
2-Methoxyphenyl isocyanate 776-04-5, 2-(Trifluoromethyl)benzenesulfonyl
chloride 837-95-6, 2-Nitro-4-trifluoromethylbenzenesulfonyl chloride
873-62-1, 3-Cyanophenol 1548-13-6, 4-Trifluoromethylphenyl isocyanate
1592-00-3, 2-Bromophenyl isocyanate 1623-92-3, 4-Phenoxyphenylsulfonyl
chloride 1899-93-0 1939-99-7, Benzylsulfonyl chloride 2237-30-1,
3-Cyanoaniline 2243-42-7, 2-Phenoxybenzoic acid 2285-12-3,
2-Trifluoromethylphenyl isocyanate 2374-03-0, 3-Hydroxy-4-aminobenzoic
acid 2493-02-9, 4-Bromophenyl isocyanate 2612-57-9, 2,4-Dichlorophenyl
isocyanate 2834-92-6, 1-Amino-2-hydroxynaphthalene 2835-98-5,
2-Hydroxy-4-methylaniline 3272-08-0, 2-Nitro-4-cyanophenol 3320-83-0,
2-Chlorophenyl isocyanate 3320-86-3, 2-Nitrophenyl isocyanate
3470-49-3 4091-26-3, Styrylsulfonyl chloride 5395-71-1, 2-Ethoxyphenyl
isocyanate 5417-63-0, 3-Amino-2-hydroxynaphthalene 6272-38-4,
2-Benzyloxyphenol 6344-59-8, 1-Hydroxy-2-nitrofluorene 13020-57-0,
3-Hydroxybenzophenone 16629-19-9, 2-Thiophenesulfonyl chloride
16744-98-2, 2-Fluorophenyl isocyanate 17337-13-2, 2-Phenylphenyl
isocyanate 17573-92-1, 3-Methoxythiophene 17802-02-7,
3-Chloro-2-nitrophenol 18493-15-7 18704-37-5, 8-Quinolinesulfonyl
chloride 18908-07-1, 3-Methoxyphenyl isocyanate 20513-43-3
21286-54-4 23095-31-0, 3,4-Dimethoxyphenylsulfonyl chloride
23138-55-8, 3-Bromophenyl isocyanate 24615-22-3 35821-29-5
39234-86-1 39262-22-1 40398-01-4, 2-Chloro-6-methylphenyl isocyanate
40411-25-4, 2-Ethylphenyl isocyanate 41195-90-8, 2,3-Dichlorophenyl
isocyanate 52260-30-7, 2-Methylthiophenyl isocyanate 55076-90-9,
2,4-Dibromophenyl isocyanate 63435-16-5, Methyl 4-amino-3-
hydroxybenzoate 65295-69-4, 2,6-Difluorophenyl isocyanate 69812-29-9,
2-Acetamido-4-methyl-5-thiazolesulfonyl chloride 82419-26-9,
2,3-Difluoro-6-nitrophenol 99968-81-7, 3-Iodo-2-hydroxyaniline
126714-85-0, 2,3-Dichlorothiophene-5-sulfonyl chloride 146224-62-6,
5-Aminocarbonyl-2-aminophenol 182500-26-1, 2-Trifluoromethoxyphenyl
isocyanate 182500-27-2, 2-Amino-5,6-diphenylphenol 182500-29-4
182500-30-7, 3,5,6-Trifluoro-2-hydroxyaniline 182500-31-8,
4-Trifluoromethyl-3-fluoro-2-hydroxyaniline 183513-64-6 201532-49-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of phenylureas as IL-8 receptor antagonists)
IT 399-97-3P 402-17-5P 454-81-9P 454-82-0P 527-62-8P 1214-44-4P
1548-62-5P 4291-30-9P 4363-03-5P 5768-39-8P, 1,3-Benzodioxole-4-
carboxylic acid 7256-03-3P 14543-43-2P 15864-32-1P 18062-89-0P
18495-15-3P 28165-60-8P 28177-79-9P 31684-63-6P 38191-33-2P
43200-31-3P 43200-46-0P 53442-24-3P 53981-23-0P 53981-24-1P
55586-26-0P 60166-83-8P 67608-57-5P 68507-91-5P
72534-45-3P 86981-08-0P 87186-71-8P 87376-34-9P 92554-96-6P
101664-28-2P 115023-64-8P 115023-65-9P 115551-33-2P 116278-69-4P
139729-85-4P 152998-95-3P 153506-06-0P 182499-74-7P 182499-76-9P

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| 182499-78-1P | 182499-79-2P | 182499-80-5P | 182499-81-6P | 182499-82-7P |
| 182499-83-8P | 182499-84-9P | 182499-85-0P | 182499-86-1P | 182499-87-2P |
| 182499-88-3P | 182499-89-4P | 182499-90-7P | 182499-91-8P | 182499-92-9P |
| 182499-93-0P | 182499-94-1P | 182499-95-2P | 182499-96-3P | 182499-97-4P |
| 182499-98-5P | 182499-99-6P | 182500-00-1P | 182500-01-2P | 182500-02-3P |
| 182500-03-4P | 182500-04-5P | 182500-05-6P | 182500-06-7P | 182500-07-8P |
| 182500-08-9P | 182500-09-0P | 182500-10-3P | 182500-11-4P | 182500-12-5P |
| 182500-13-6P | 182500-14-7P | 182500-15-8P | 182500-16-9P | 182500-17-0P |
| 182500-18-1P | 182500-19-2P | 182500-20-5P | 182500-21-6P | 182500-22-7P |
| 182500-23-8P | 182500-24-9P | 182500-25-0P | 182700-32-9P | 182700-33-0P |

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. of phenylureas as IL-8 receptor antagonists)

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 - (18) Anon; WO 9314146 1993 HCAPLUS
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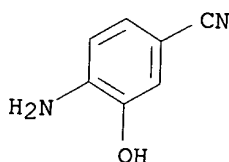
IT 55586-26-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of phenylureas as IL-8 receptor antagonists)

RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)

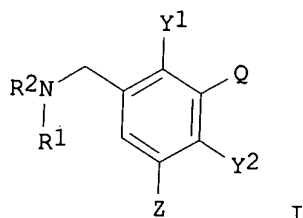


L13 ANSWER 22 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1999:96199 HCAPLUS
 DN 130:155251
 TI Alkyl(hydroxybenzyl)amines, their preparation and use as anticorrosion agents for metal surfaces
 IN Schapira, Joseph; Cheminaud, Jean-Claude; Droniou, Patrick; Gasse, Jean-Jacques; Guimon, Michele; Bonnin, Joel; Gagnepain, Stephane
 PA CFPI Industries, Fr.
 SO PCT Int. Appl., 30 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 IC ICM C07C215-80
 ICS C07C215-50; C23F011-14; C09D005-08

CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
Section cross-reference(s): 42

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9905089 | A1 | 19990204 | WO 1998-FR1629 | 19980723 |
| | W: CA, JP, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | FR 2766483 | A1 | 19990129 | FR 1997-9503 | 19970725 |
| | CN 1204646 | A | 19990113 | CN 1998-103149 | 19980702 |
| | EP 998448 | A1 | 20000510 | EP 1998-940319 | 19980723 |
| | R: AT, BE, DE, DK, ES, FR, GB, IT, NL, SE, PT | | | | |
| | JP 2001510820 | T2 | 20010807 | JP 2000-504091 | 19980723 |
| PRAI | FR 1997-9503 | A | 19970725 | | |
| | WO 1998-FR1629 | W | 19980723 | | |
| OS | MARPAT 130:155251 | | | | |
| GI | | | | | |



- AB The amines have the formula I [Q = OH, NH₂; (each) R₁ = C₁-8 ((poly)hydroxy)alkyl; (each) R₂ = H, C₁-8 ((poly)hydroxy)alkyl; Y₁ and/or Y₂ = OH; Z = H, CH₂NR₁R₂]. I act as reducing agents and as chelating agents for Fe, and are useful on metal surfaces for prevention of corrosion and for improving subsequent paint adhesion. Thus, condensation of o-C₆H₄(OH)₂ with HCHO and N-methylglucamine gave a I as an isomer mixt., which was effective as is and was not sepd. An aq. soln. contg. adipic acid 0.5, H₃PO₄ 0.4, the I 1.0, soda 0.15 g/L and triethylenetetramine to pH 6.0 was applied to degreased and rinsed steel, dried, and coated with a com. paint to show excellent adhesion and corrosion resistance.
- ST hydroxybenzylamine deriv corrosion inhibitor; primer hydroxybenzylamine deriv
- IT Primers (paints)
(prepn. of alkyl(hydroxybenzyl)amines as adhesion promoters for metal surfaces)
- IT Galvanized steel
RL: MSC (Miscellaneous)
(prepn. of alkyl(hydroxybenzyl)amines as anticorrosion agents for)
- IT Corrosion inhibitors
Mannich reaction
(prepn. of alkyl(hydroxybenzyl)amines as anticorrosion agents for metal surfaces)
- IT 12597-69-2, Steel, miscellaneous
RL: MSC (Miscellaneous)
(prepn. of alkyl(hydroxybenzyl)amines as anticorrosion agents for)
- IT 220247-02-9P 220247-03-0P 220247-06-3P 220247-07-4P 220247-08-5P

220247-09-6P **220247-10-9P** 220247-11-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepn. of alkyl(hydroxybenzyl)amines as anticorrosion agents for metal surfaces)

IT 50-00-0, Formaldehyde, reactions 87-66-1, Pyrogallol 95-55-6, 2-Aminophenol 109-83-1, 2-(Methylamino)ethanol 120-80-9, 1,2-Benzenediol, reactions 6284-40-8, N-Methylglucamine

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of alkyl(hydroxybenzyl)amines as anticorrosion agents for metal surfaces)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

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IT **220247-10-9P**

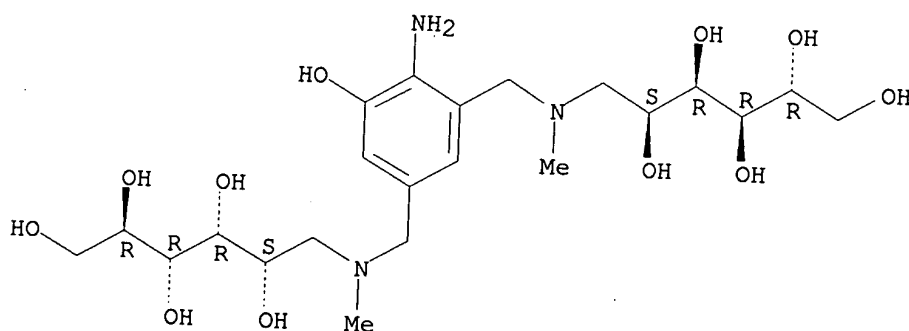
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepn. of alkyl(hydroxybenzyl)amines as anticorrosion agents for metal surfaces)

RN 220247-10-9 HCAPLUS

CN D-Glucitol, 1,1'-[(4-amino-5-hydroxy-1,3-phenylene)bis[methylene(methylimi no)]]bis[1-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L13 ANSWER 23 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:774255 HCAPLUS

DN 130:10667

TI Preparation of hydroxyanilino-cyclobutenediones as smooth muscle relaxants.

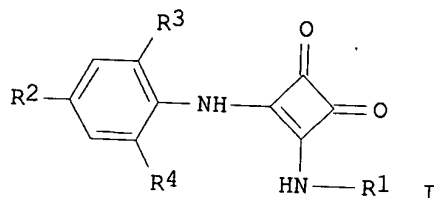
IN Quagliato, Dominick A.; Matelan, Edward M.; Antane, Madelene M.

PA American Home Products Corporation, USA

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

SO U.S., 6 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM A01N033-02
 ICS A01N033-06; C07C051-16; C07C211-00
 NCL 514646000
 CC 1-12 (Pharmacology)
 Section cross-reference(s): 25
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|-----------------|----------|
| PI | US 5840764 | A | 19981124 | | |
| PRAI | US 1998-7335 | | 19980114 | US 1998-7335 | 19980114 |
| OS | MARPAT 130:10667 | | | | |
| GI | | | | | |



AB The title compds. I (R1 = alkyl, cycloalkyl, hydroxyalkyl, fluoroalkyl, or polyfluoroalkyl; R2, R3 and R4 = H, OH CN, halo, alkyl or hydroxyl) and their salts are prepd. as smooth muscle relaxants. I are useful for the treatment of incontinence and irritable bowel syndrome.

ST hydroxyanilinocyclobutenedione deriv prepn smooth muscle relaxant; incontinence treatment hydroxyanilinocyclobutenedione deriv; irritable bowel syndrome treatment hydroxyanilinocyclobutenedione deriv

IT Bladder
 (incontinence; treatment with hydroxyanilinocyclobutenediones)

IT Intestine, disease
 (irritable bowel syndrome; treatment with hydroxyanilinocyclobutenediones)

IT Muscle relaxants
 (smooth; hydroxyanilinocyclobutenediones)

IT 18495-15-3P, 3-Hydroxy-4-nitrobenzonitrile **55586-26-0P**
 129298-23-3P 211172-51-9P 211172-52-0P 211172-53-1P 211172-54-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate in prepn. of hydroxyanilinocyclobutenedione deriv. smooth muscle relaxant)

IT 211172-44-0P 211172-45-1P 211172-48-4P 211172-55-3P 211172-56-4P
 211172-57-5P 216147-99-8P 216148-00-4P
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. as smooth muscle relaxant)

IT 75-64-9, tert-Butylamine, reactions 594-39-8, tert-Amylamine
 2835-97-4, 2-Amino-3-methylphenol 5231-87-8, Diethyl squarate
 22526-47-2 66228-31-7 142596-50-7 177476-75-4, 3-Methoxy-4-nitrobenzonitrile
 RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant in prepn. of hydroxyanilinocyclobutenedione deriv. smooth muscle relaxant)

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD

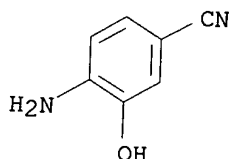
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IT 55586-26-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate in prepn. of hydroxyanilinocyclobutenedione deriv. smooth muscle relaxant)

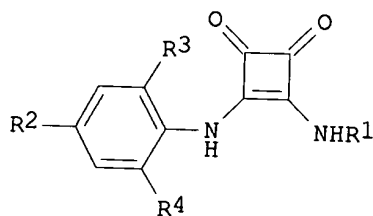
RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



- L13 ANSWER 24 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
- AN 1998:543042 HCAPLUS
- DN 129:161411
- TI Preparation of 3-alkylamino-4-anilino-3-cyclobutene-1,2-diones as smooth muscle relaxants.
- IN Quagliato, Dominick Anthony; Matelan, Edward Martin; Antane, Madelene Miyoko
- PA American Home Products Corporation, USA
- SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
- DT Patent
- LA English
- IC ICM C07C225-20
ICS C07C255-59
- CC 25-16 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1
- FAN.CNT 1

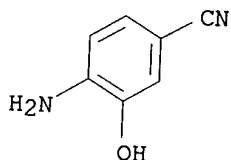
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | WO 9833763 | A1 | 19980806 | WO 1998-US1466 | 19980127 |
| | W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | AU 9862502 | A1 | 19980825 | AU 1998-62502 | 19980127 |
| | ZA 9800755 | A | 19990729 | ZA 1998-755 | 19980129 |
| PRAI | US 1997-792811 | A | 19970130 | | |
| | WO 1998-US1466 | W | 19980127 | | |
| OS | MARPAT 129:161411 | | | | |
| GI | | | | | |



I

- AB Title compds. (I; R1 = alkyl, cycloalkyl, hydroxyalkyl, fluoroalkyl, polyfluoroalkyl; 1 of R2-R4 = OH and the other 2 = H, CN, halo, alkyl, OH), were prep'd. Thus, 3-ethoxy-4-(2-hydroxy-6-cyanophenyl)amino-3-cyclobutene-1,2-dione (prepn. given) and tert-amylamine were stirred in CH₂Cl₂ to give 46% 3-(tert-amylamino)-4-(2-hydroxy-6-cyanophenyl)amino-3-cyclobutene-1,2-dione. The latter inhibited contraction of rabbit bladder strips with IC₅₀ = 0.45 .mu.M.
- ST alkylaminoanilino-cyclobutenedione prep'n smooth muscle relaxant; cyclobutenedione amino anilino smooth muscle relaxant; irritable bowel syndrome treatment aminoanilino-cyclobutenedione; incontinence treatment aminoanilino-cyclobutenedione
- IT Bladder (incontinence, treatment; prep'n. of 3-alkylamino-4-anilino-3-cyclobutene-1,2-diones as smooth muscle relaxants)
- IT Intestine, disease (irritable bowel syndrome, treatment; prep'n. of 3-alkylamino-4-anilino-3-cyclobutene-1,2-diones as smooth muscle relaxants)
- IT Muscle relaxants (smooth; prep'n. of 3-alkylamino-4-anilino-3-cyclobutene-1,2-diones as smooth muscle relaxants)
- IT 211172-44-0P 211172-45-1P 211172-46-2P 211172-47-3P 211172-48-4P 211172-49-5P 211172-50-8P 211172-55-3P 211172-56-4P 211172-57-5P
- RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
- (prep'n. of 3-alkylamino-4-anilino-3-cyclobutene-1,2-diones as smooth muscle relaxants)
- IT 75-64-9, tert-Butylamine, reactions 594-39-8, tert-Amylamine

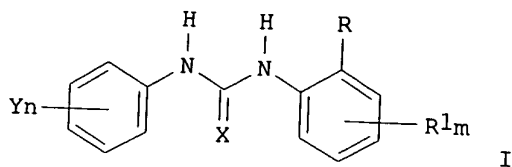
2835-97-4, 2-Amino-3-methylphenol 5231-87-8, Diethyl squarate
 66228-31-7 142596-50-7 177476-75-4, 3-Methoxy-4-nitrobenzonitrile
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of 3-alkylamino-4-anilino-3-cyclobutene-1,2-diones as smooth
 muscle relaxants)
 IT 18495-15-3P **55586-26-0P** 129298-23-3P 211172-51-9P
 211172-52-0P 211172-53-1P 211172-54-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. of 3-alkylamino-4-anilino-3-cyclobutene-1,2-diones as smooth
 muscle relaxants)
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Butera, J; US 5403853 A 1995 HCAPLUS
 (2) Butera, J; US 5506252 A 1996 HCAPLUS
 IT **55586-26-0P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. of 3-alkylamino-4-anilino-3-cyclobutene-1,2-diones as smooth
 muscle relaxants)
 RN 55586-26-0 HCAPLUS
 CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 25 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1998:479029 HCAPLUS
 DN 129:122458
 TI Preparation of N,N'-diphenylurea derivatives as interleukin-8 receptor
 antagonists
 IN Widdowson, Katherine Louisa; Veber, Daniel Frank; Jurewicz, Anthony
 Joseph; Hertzberg, Robert Philip; Rutledge, Melvin Clarence, Jr.
 PA Smithkline Beecham Corporation, USA
 SO U.S., 50 pp., Cont.-in-part of U.S. Ser. No. 641,990.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM A61K031-47
 ICS A61K031-425; A61K031-38; A61K031-17
 NCL 514311000
 CC 25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 1
 FAN.CNT 4

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 5780483 | A | 19980714 | US 1996-701299 | 19960821 |
| | US 5886044 | A | 19990323 | US 1996-641990 | 19960320 |
| | US 6211373 | B1 | 20010403 | US 1998-111663 | 19980708 |
| PRAI | US 1995-390260 | B2 | 19950217 | | |
| | US 1996-641990 | A2 | 19960320 | | |

WO 1996-US2260 W 19960216
 US 1996-701299 A3 19960821
 OS MARPAT 129:122458
 GI



- AB The title compds. [I; X = O, S; R = any functional moiety having an ionizable H and a pKa of .ltoreq.10 (sic); R1, Y = H, halo, NO2, cyano, (halo)alkyl, alkenyl, (halo)alkoxy, N3, HO, hydroxyalkyl, aryl, arylalkyl, aryloxy, arylalkoxy, heteroaryl, heteroarylalkyl, heterocyclyl, heterocyclylalkyl, heterocyclylalkoxy, arylalkenyl, heteroarylalkenyl, (un)substituted NH2, CONH2, or SO3H, etc.; m, n = 1-3], which are useful for the treatment of disease states mediated by the chemokine, interleukin-8 (IL-8) (no data), are prep'd. Thus, Me 4-amino-3-hydroxybenzoate was added to a soln. of Ph isocyanate in PhMe and the resulting mixt. was stirred at .apprx.80.degree. for 24-48 h to give 90% N-[2-hydroxy-4-(methoxycarbonyl)phenyl]-N'-phenylurea.
- ST phenylurea prepn interleukin 8 receptor antagonist; psoriasis treatment diphenylurea prepn; atopic dermatitis treatment diphenylurea; asthma treatment diphenylurea; chronic obstructive pulmonary disease treatment diphenylurea; adult respiratory distress syndrome treatment diphenylurea; arthritis treatment diphenylurea; inflammatory bowel disease treatment diphenylurea; Crohn disease treatment diphenylurea; ulcerative colitis treatment diphenylurea; septic shock treatment diphenylurea; endotoxic shock treatment diphenylurea; gram neg sepsis treatment diphenylurea; toxic shock syndrome treatment diphenylurea; cardiac renal reperfusion injury treatment diphenylurea; glomeruli nephritis treatment diphenylurea; thrombosis treatment diphenylurea; Alzheimer disease treatment diphenylurea; graft vs host reaction treatment diphenylurea; allograft rejection treatment diphenylurea; stroke treatment diphenylurea
- IT Mental disorder
 (Alzheimer's disease, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Chemokine receptors
 Chemokine receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (CXCR1, antagonists; prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Chemokine receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (CXCR2, antagonists; prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Intestine, disease
 (Crohn's, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Transplant rejection
 (allotransplant; prepn. of N,N'-diphenylurea derivs. as interleukin-8

receptor antagonists for disease treatment)

IT Bronchodilators
(antiasthmatics, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Dermatitis
(atopic, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Lung, disease
(chronic obstructive, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Shock (circulatory collapse)
(endotoxin, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Kidney, disease
(glomerulonephritis, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Transplant and Transplantation
(graft-vs.-host reaction, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Septicemia
(gram-neg.; prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Heart, disease
Kidney, disease
(injury, reperfusion; prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Respiratory distress syndrome
(newborn; adult, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Anti-inflammatory agents
Anticoagulants
Psoriasis
(prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Brain, disease
(stroke, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Interleukin 8 receptors
Interleukin 8 receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.alpha., antagonists; prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Interleukin 8 receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.beta., antagonists; prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT 25751-87-5P 85915-46-4P 88846-90-6P 92949-89-8P 117745-32-1P
119838-01-6P 160383-78-8P 160383-79-9P 160383-90-4P 182497-99-0P
182498-03-9P 182498-07-3P 182498-11-9P 182498-15-3P 182498-18-6P
182498-20-0P 182498-22-2P 182498-25-5P 182498-26-6P 182498-28-8P
182498-30-2P 182498-31-3P 182498-32-4P 182498-33-5P 182498-34-6P
182498-35-7P 182498-38-0P 182498-40-4P 182498-42-6P 182498-44-8P
182498-45-9P 182498-46-0P 182498-47-1P 182498-48-2P 182498-50-6P
182498-52-8P 182498-54-0P 182498-55-1P 182498-57-3P 182498-59-5P
182498-62-0P 182498-63-1P 182498-64-2P 182498-65-3P 182498-66-4P
182498-67-5P 182498-68-6P 182498-69-7P 182498-70-0P 182498-71-1P

| | | | | |
|--------------|--------------|--------------|--------------|--------------|
| 182498-72-2P | 182498-73-3P | 182498-74-4P | 182498-75-5P | 182498-76-6P |
| 182498-77-7P | 182498-78-8P | 182498-79-9P | 182498-80-2P | 182498-81-3P |
| 182498-82-4P | 182498-83-5P | 182498-84-6P | 182498-85-7P | 182498-86-8P |
| 182498-87-9P | 182498-88-0P | 182498-89-1P | 182498-90-4P | 182498-91-5P |
| 182498-92-6P | 182498-93-7P | 182498-94-8P | 182498-95-9P | 182498-96-0P |
| 182498-97-1P | 182498-98-2P | 182498-99-3P | 182499-00-9P | 182499-01-0P |
| 182499-02-1P | 182499-03-2P | 182499-04-3P | 182499-05-4P | 182499-06-5P |
| 182499-07-6P | 182499-08-7P | 182499-09-8P | 182499-10-1P | 182499-11-2P |
| 182499-12-3P | 182499-13-4P | 182499-14-5P | 182499-15-6P | 182499-16-7P |
| 182499-17-8P | 182499-18-9P | 182499-19-0P | 182499-20-3P | 182499-21-4P |
| 182499-22-5P | 182499-23-6P | 182499-25-8P | 182499-26-9P | 182499-27-0P |
| 182499-28-1P | 182499-29-2P | 182499-30-5P | 182499-31-6P | 182499-32-7P |
| 182499-33-8P | 182499-34-9P | 182499-35-0P | 182499-36-1P | 182499-37-2P |
| 182499-38-3P | 182499-39-4P | 182499-40-7P | 182499-41-8P | 182499-42-9P |
| 182499-43-0P | 182499-44-1P | 182499-45-2P | 182499-46-3P | 182499-47-4P |
| 182499-48-5P | 182499-49-6P | 182499-50-9P | 182499-51-0P | 182499-52-1P |
| 182499-53-2P | 182499-54-3P | 182499-55-4P | 182499-56-5P | 182499-57-6P |
| 182499-58-7P | 182499-59-8P | 182499-60-1P | 182499-61-2P | 182499-62-3P |
| 182499-63-4P | 182499-64-5P | 182499-65-6P | 182499-66-7P | 182499-67-8P |
| 182499-68-9P | 182499-69-0P | 182499-70-3P | 182499-71-4P | 182499-72-5P |
| 182501-57-1P | 182700-31-8P | 210358-24-0P | 210358-26-2P | 210358-29-5P |
| 210358-30-8P | 210358-31-9P | 210358-32-0P | 210358-33-1P | 210358-34-2P |
| 210358-35-3P | 210358-36-4P | 210358-37-5P | 210358-38-6P | 210358-39-7P |
| 210358-40-0P | 210358-41-1P | 210358-42-2P | 210358-43-3P | 210358-44-4P |
| 210358-45-5P | 210358-46-6P | 210358-47-7P | 210358-48-8P | 210358-49-9P |
| 210358-50-2P | 210358-51-3P | 210358-52-4P | 210358-53-5P | 210358-54-6P |
| 210358-55-7P | 210358-56-8P | 210358-57-9P | 210358-58-0P | 210358-59-1P |
| 210358-60-4P | 210358-61-5P | 210358-62-6P | 210358-63-7P | 210358-64-8P |
| 210358-65-9P | 210358-66-0P | 210358-67-1P | 210358-68-2P | 210358-69-3P |
| 210358-70-6P | 210358-71-7P | 210358-72-8P | 210358-73-9P | 210358-74-0P |
| 210358-75-1P | 210358-77-3P | 210358-78-4P | 210358-79-5P | 210358-80-8P |
| 210358-81-9P | 210358-82-0P | 210358-84-2P | 210358-86-4P | 210358-88-6P |
| 210358-90-0P | 210358-93-3P | 210358-95-5P | 210358-97-7P | 210358-98-8P |
| 210358-99-9P | 210359-00-5P | 210359-01-6P | 210359-02-7P | 210359-03-8P |
| 210359-04-9P | 210359-05-0P | 210359-06-1P | 210359-07-2P | 210359-08-3P |

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT 86-84-0, 1-Naphthyl isocyanate 87-17-2, 2-Phenylaminocarbonylphenol
 88-67-5, 2-Iodobenzoic acid 90-43-7, 2-Phenylphenol 91-93-0 95-54-5,
 o-Phenylenediamine, reactions 95-55-6, 2-Aminophenol 98-09-9,
 Phenylsulfonyl chloride 98-17-9, .alpha.,.alpha.,.alpha.-Trifluoro-m-
 cresol 99-56-9, 4-Nitro-1,2-phenylenediamine 99-57-0,
 5-Nitro-2-hydroxyaniline 100-46-9, Benzylamine, reactions 103-71-9,
 Phenyl isocyanate, reactions 106-40-1, 4-Bromoaniline 116-63-2
 117-77-1, 2-Hydroxy-3-aminoanthraquinone 117-99-7 121-51-7,
 3-Nitrobenzenesulfonyl chloride 121-60-8, 4-Acetamidophenylsulfonyl
 chloride 121-88-0, 2-Amino-5-nitrophenol 124-38-9, Carbon dioxide,
 reactions 137-07-5, 2-Aminothiophenol 274-09-9, 1,3-Benzodioxole
 320-76-3 329-01-1, 3-Trifluoromethylphenyl isocyanate 385-01-3,
 2-Nitro-3-fluorophenol 394-31-0, 2-Amino-5-hydroxybenzoic acid
 394-33-2, 4-Fluoro-2-nitrophenol 400-98-6, 4-Amino-3-
 nitrobenzotrifluoride 444-30-4, 2-Trifluoromethylphenol 446-36-6,
 5-Fluoro-2-nitrophenol 463-71-8, Thiophosgene 534-85-0,
 2-Hydroxy-3-aminobenzoic acid 544-92-3, Copper(I) cyanide 570-23-0,
 2-Anilinoaliline 576-24-9, 2,3-Dichlorophenol 580-51-8, 3-Phenylphenol

603-87-2, 2-Hydroxy-3-nitroaniline 609-89-2, 4,6-Dichloro-2-nitrophenol
611-20-1, 2-Cyanophenol 614-68-6, 2-Methylphenyl isocyanate 615-36-1,
2-Bromoaniline 618-45-1, 3-Isopropylphenol 620-17-7, 3-Ethylphenol
644-35-9, 2-Propylphenol 700-87-8, 2-Methoxyphenyl isocyanate
776-04-5, 2-(Trifluoromethyl)benzenesulfonyl chloride 837-95-6,
2-Nitro-4-(trifluoromethyl)benzenesulfonyl chloride 873-62-1,
3-Cyanophenol 1548-13-6, 4-Trifluoromethylphenyl isocyanate 1592-00-3,
2-Bromophenyl isocyanate 1623-92-3, 4-Phenoxyphenylsulfonyl chloride
1762-95-4 1899-93-0, 3-Methylbenzenesulfonyl chloride 1939-99-7,
Benzylsulfonyl chloride 2237-30-1, 3-Cyanoaniline 2243-42-7,
2-Phenoxybenzoic acid 2285-12-3, 2-Trifluoromethylphenyl isocyanate
2374-03-0, 3-Hydroxy-4-aminobenzoic acid 2493-02-9, 4-Bromophenyl
isocyanate 2612-57-9, 2,4-Dichlorophenyl isocyanate 2834-92-6,
1-Amino-2-hydroxynaphthalene 2835-98-5, 2-Hydroxy-4-methylaniline
3272-08-0, 2-Nitro-4-cyanophenol 3320-83-0, 2-Chlorophenyl isocyanate
3320-86-3, 2-Nitrophenyl isocyanate 3470-49-3, 5-Hydroxy-1-indanone
4091-26-3, Styrylsulfonyl chloride 5395-71-1, 2-Ethoxyphenyl isocyanate
5417-63-0, 3-Amino-2-hydroxynaphthalene 6344-59-8, 1-Hydroxy-2-
nitrofluorene 7664-41-7, Ammonia, reactions 13020-57-0,
3-Hydroxybenzophenone 13360-57-1, Dimethylsulfamoyl chloride
14755-02-3 16629-19-9, 2-Thiophenesulfonyl chloride 16744-98-2,
2-Fluorophenyl isocyanate 17337-13-2, 2-Phenylphenyl isocyanate
17573-92-1, 3-Methoxythiophene 17802-02-7, 3-Chloro-2-nitrophenol
18162-48-6, Tert-Butyldimethylsilyl chloride 18493-15-7 18704-37-5,
8-Quinolinesulfonyl chloride 18908-07-1, 3-Methoxyphenyl isocyanate
20513-43-3 21286-54-4, (+)-10-Camphorsulfonyl chloride 23095-31-0,
3,4-Dimethoxyphenylsulfonyl chloride 24615-22-3 26386-88-9,
Diphenylphosphoryl azide 26628-22-8, Sodium azide 32315-10-9,
Triphosgene 35821-29-5 39234-86-1 39262-22-1, (-)-10-Camphorsulfonyl
chloride 40398-01-4, 2-Chloro-6-methylphenyl isocyanate 40411-25-4,
2-Ethylphenyl isocyanate 41195-90-8, 2,3-Dichlorophenyl isocyanate
43115-40-8, 2-Amino-4-(ethylsulfonyl)phenol 52260-30-7,
2-Methylthiophenyl isocyanate 55076-90-9, 2,4-Dibromophenyl isocyanate
63435-16-5, Methyl 4-amino-3-hydroxybenzoate 65295-69-4,
2,6-Difluorophenyl isocyanate 69812-29-9, 2-Acetamido-4-methyl-5-
thiazolesulfonyl chloride 82419-26-9, 2,3-Difluoro-6-nitrophenol
93254-81-0, 2-Benzyloxybenzophenone 99968-81-7, 3-Iodo-2-hydroxyaniline
126714-85-0, 2,3-Dichlorothiophene-5-sulfonyl chloride 146224-62-6,
5-Aminocarbonyl-2-aminophenol 182500-26-1, 2-Trifluoromethoxyphenyl
isocyanate 182500-27-2, 2-Amino-5,6-diphenylphenol 182500-28-3,
2-Nitro-5-methyl-4-bromophenol 182500-29-4 182500-30-7,
3,5,6-Trifluoro-2-hydroxyaniline 182500-31-8, 4-Trifluoromethyl-3-fluoro-
2-hydroxyaniline 183513-64-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor
antagonists for disease treatment)

IT 386-72-1P, 2-Nitro-3-trifluoromethylphenol 399-97-3P,
2-Amino-4-fluorophenol 400-99-7P, 2-Nitro-4-trifluoromethylphenol
454-81-9P, 2-Amino-4-trifluoromethylphenol 527-62-8P,
2-Amino-4,6-dichlorophenol 1214-44-4P, 2-Amino-6-
(phenylaminocarbonyl)phenol 4291-30-9P, 2-Nitro-6-phenylphenol
4363-03-5P, 2-Amino-5-phenylphenol 5768-39-8P, 2,3-Methylenedioxybenzoic
acid 6236-69-7P 7256-03-3P, 2-Amino-1-hydroxyfluorene 14543-43-2P,
2-Amino-4-cyanophenol 15864-32-1P 18062-89-0P, 2-Nitro-5-phenylphenol
18495-15-3P, 2-Nitro-5-cyanophenol 28165-60-8P, 2-Nitro-5,6-
dichlorophenol 28177-79-9P, 2-Nitro-6-cyanophenol 31684-63-6P,
4-Amino-3-hydroxybenzophenone 43200-31-3P, 2-(Phenylsulfamido)aniline
43200-46-0P 53442-24-3P, 2-Amino-6-phenylphenol 53981-23-0P,

2-Amino-3-fluorophenol 53981-24-1P, 2-Amino-5-fluorophenol
55586-26-0P, 2-Amino-5-cyanophenol 56962-00-6P,
 2-Amino-3-chlorophenol 60166-83-8P, 3-Methoxy-2-thiophenecarboxylic acid
 63450-94-2P 67608-57-5P, 2-Amino-6-cyanophenol 68507-91-5P,
 2-Nitro-6-(phenylaminocarbonyl)phenol 86981-08-0P 87186-71-8P,
 3-(Phenylsulfamido)benzonitrile 87376-34-9P 92554-96-6P,
 2-(8-Quinolinylnsulfonamino)aniline 101664-28-2P, 2-Nitro-6-ethylphenol
 106877-48-9P, 2-Amino-3-trifluoromethylphenol 115023-64-8P,
 2-Nitro-6-propylphenol 115023-65-9P, 2-Amino-6-propylphenol
 115551-33-2P, 2-Hydroxy-3,4-difluoroaniline 116278-69-4P,
 2-Amino-5,6-dichlorophenol 139729-85-4P, 2-Amino-5-isopropylphenol
 153506-06-0P, 2-Nitro-5-isopropylphenol 182499-74-7P,
 2-Tert-Butyldimethylsilyloxy-5-nitrophenol 182499-76-9P 182499-78-1P
 182499-79-2P 182499-80-5P, Bis(3-bromo-6-aminophenyl) disulfide
 182499-81-6P, 4-Nitro-3-(phenylsulfamido)benzonitrile 182499-82-7P,
 4-Amino-3-(phenylsulfamido)benzonitrile 182499-83-8P,
 2-(Styrylsulfamido)aniline 182499-84-9P 182499-85-0P,
 2-(2-Thiophenesulfamido)aniline 182499-86-1P, 2-(3-
 Tolylsulfonamino)aniline 182499-87-2P, 2-(Benzylsulfonamino)aniline
 182499-88-3P 182499-89-4P, 2-Amino-6-fluoro-4-bromophenol
 182499-90-7P, 2-Amino-6-ethylphenol 182499-91-8P, 2-Nitro-5-methyl-6-
 bromophenol 182499-92-9P, 2-Nitro-5-methyl-6-cyanophenol 182499-93-0P,
 2-Amino-5-methyl-6-cyanophenol 182499-94-1P, 4-Nitro-3-
 hydroxybenzophenone 182499-95-2P, 3-Nitro-2-hydroxybenzophenone
 182499-96-3P, 3-Amino-2-hydroxybenzophenone 182499-97-4P,
 2-Nitro-6-benzyloxyphenol 182499-98-5P, 2-Amino-6-benzyloxyphenol
 182499-99-6P 182500-00-1P 182500-01-2P 182500-02-3P 182500-03-4P
 182500-04-5P 182500-05-6P 182500-06-7P 182500-07-8P 182500-08-9P
 182500-09-0P 182500-10-3P 182500-11-4P 182500-12-5P 182500-13-6P,
 2-(Phenethylsulfonamido)aniline 182500-14-7P 182500-15-8P
 182500-16-9P 182500-17-0P 182500-18-1P 182500-19-2P 182500-20-5P
 182500-21-6P 182500-22-7P 182500-23-8P 182500-24-9P 182500-25-0P
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

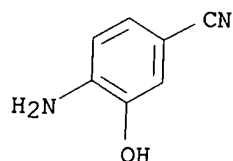
(prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor
 antagonists for disease treatment)

RE.CNT 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD
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- (11) Anon; JP 03215848 1992 HCAPLUS
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 IT 55586-26-0P, 2-Amino-5-cyanophenol
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor
 antagonists for disease treatment)
 RN 55586-26-0 HCAPLUS
 CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)

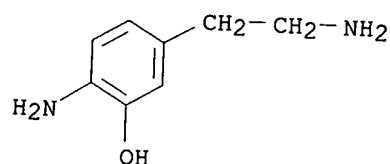


- L13 ANSWER 26 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1998:244370 HCAPLUS
 DN 129:25291
 TI Chemical degradation of melanins: application to identification of
 dopamine-melanin
 AU Ito, Shosuke; Wakamatsu, Kazumasa
 CS Fujita Health University School of Health Sciences, Aichi, 470-1192, Japan
 SO Pigment Cell Research (1998), 11(2), 120-126
 CODEN: PCREEA; ISSN: 0893-5785
 PB Munksgaard International Publishers Ltd.
 DT Journal
 LA English
 CC 9-15 (Biochemical Methods)
 AB Melanocytes produce two chem. distinct types of melanin pigments,
 eumelanins and pheomelanins. These pigments can be quant. analyzed by
 acidic KMnO4 oxidn. or reductive hydrolysis with hydriodic acid (HI) to
 form pyrrole-2,3,5-tricarboxylic acid (PTCA) or aminohydroxyphenylalanine
 (AHP), resp. Dark brown melanin-like pigments are also widespread in
 nature, for example, in the substantia nigra of humans and primates
 (neuromelanin), in butterfly wings and in the fungus Cryptococcus
 neoformans. To characterize such diverse types of melanins, we have
 improved the alk. H2O2 oxidn. method of Napolitano et al. and re-examd.
 the HI hydrolysis method developed by Wakamatsu et al. The results
 obtained with H2O2 oxidn. show that (1) pyrrole-2,3-dicarboxylic acid
 (PDCA), a specific marker of 5,6-dihydroxyindole units in melanins, is
 produced in yields ten times higher than by acidic KMnO4 oxidn., and (2)
 PTCA is artificially produced from pheomelanins. The results with HI
 hydrolysis show that dopamine-melanin produces a 1:1 mixt. of 3-amino and
 4-amino isomers of aminohydroxyphenyl-ethylamine, while the isomer ratio
 is about 0.2 in melanins prepd. from dopamine and cysteine. These results
 indicate that alk. H2O2 oxidn. is useful in characterizing synthetic and
 natural eumelanins and that reductive hydrolysis with HI can be applied to

analyzing oxidn. products of dopamine such as neuromelanin.
 ST melanin dopamine identification alk peroxide oxidn
 IT Melanins
 RL: ANT (Analyte); ANST (Analytical study)
 (eu-; identification of dopamine-melanin by chem. degrdn. using alk. or
 acidic oxidn. with spectroscopic characterization)
 IT Melanins
 Pheomelanins
 RL: ANT (Analyte); ANST (Analytical study)
 (identification of dopamine-melanin by chem. degrdn. using alk. or
 acidic oxidn. with spectroscopic characterization)
 IT Melanins
 RL: ANT (Analyte); ANST (Analytical study)
 (neuromelanins; identification of dopamine-melanin by chem. degrdn.
 using alk. or acidic oxidn. with spectroscopic characterization)
 IT 51-61-6D, Dopamine, synthetic melanin, analysis 52-90-4D, Cysteine,
 synthetic melanin, analysis 59-92-7D, DOPA, synthetic melanin, analysis
 945-32-4, 1H-Pyrrole-2,3,5-tricarboxylic acid 1125-32-2,
 1H-Pyrrole-2,3-dicarboxylic acid 19641-92-0D, Cysteinyl dopa, synthetic
 melanin 74923-08-3 **104083-77-4**
 RL: ANT (Analyte); ANST (Analytical study)
 (identification of dopamine-melanin by chem. degrdn. using alk. or
 acidic oxidn. with spectroscopic characterization)
 RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
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- IT **104083-77-4**

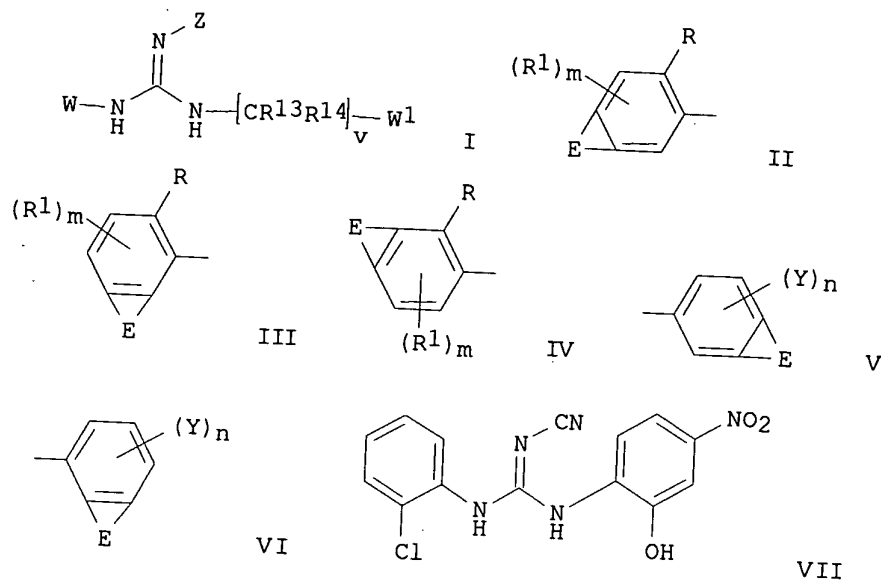
RL: ANT (Analyte); ANST (Analytical study)
 (identification of dopamine-melanin by chem. degrdn. using alk. or
 acidic oxidn. with spectroscopic characterization)
 RN 104083-77-4 HCAPLUS
 CN Phenol, 2-amino-5-(2-aminoethyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 27 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1998:124008 HCAPLUS
 DN 128:180230
 TI Preparation of cyanoguanidines as interleukin-8 (IL-8) receptor
 antagonists
 IN Bryan, Deborah Lynn; Gleason, John Gerald; Widdowson, Katherine L.
 PA Smithkline Beecham Corporation, USA; Bryan, Deborah Lynn; Gleason, John
 Gerald; Widdowson, Katherine L.
 SO PCT Int. Appl., 58 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-44
 ICS A61K031-495; A61K031-505; A61K031-535; C07D211-56; C07D213-84;
 C07D213-86; C07D213-88; C07D251-32; C07D401-12; C07D413-12;
 C07D471-04
 CC 25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 1
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| PI WO 9806397 | A1 | 19980219 | WO 1997-US14581 | 19970815 |
| W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, GH, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| ZA 9707301 | A | 19980216 | ZA 1997-7301 | 19970814 |
| AU 9740750 | A1 | 19980306 | AU 1997-40750 | 19970815 |
| AU 723816 | B2 | 20000907 | | |
| EP 929302 | A1 | 19990721 | EP 1997-938425 | 19970815 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| BR 9711140 | A | 19990817 | BR 1997-11140 | 19970815 |
| CN 1232398 | A | 19991020 | CN 1997-198603 | 19970815 |
| JP 2000516619 | T2 | 20001212 | JP 1998-510106 | 19970815 |
| TW 461878 | B | 20011101 | TW 1997-86111871 | 19971003 |
| US 6204294 | B1 | 20010320 | US 1999-230977 | 19990204 |
| NO 9900668 | A | 19990412 | NO 1999-668 | 19990212 |
| NO 2001006067 | A | 19990412 | NO 2001-6067 | 20011212 |

PRAI US 1996-23414P P 19960815
 WO 1997-US14581 W 19970815
 OS MARPAT 128:180230
 GI



AB The title compds. [I; Z = CN, OR11, C(O)R11, etc.; v = 0-4; R11 = H, Cl-4 alkyl, aryl, etc.; R13, R14 = H, Cl-4 alkyl, aryl; W = II, III, IV (wherein E = (un)substituted benzo, cyclopenta, etc.; R = any functional moiety having an ionizable hydrogen and a pKa of 10 or less; R1 = H, halo, NO2, etc.; m = 1-3); W1 = V, VI (Y = H, halo, NO2, etc.; n = 1-3)], useful in the treatment of disease states mediated by the chemokine, interleukin-8 (IL-8), were prep'd. Thus, reaction of 2-chlorophenyl isothiocyanate with cyanamide in the presence of NaOEt in EtOH followed by reacting the resulting sodium salt of N-(2-chlorophenyl)-N''-cyanathiourea with 2-hydroxy-4-nitroaniline in the presence of EDC.HCl in DMF afforded the title compd. VII which showed IC50 of 5-100 nM against IL-8 receptor binding.

ST cyanoguanidine prepn interleukin receptor antagonist
 IT Interleukin 8 receptors

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
 (prepn. of cyanoguanidines as interleukin-8 (IL-8) receptor antagonists)

IT 203201-25-6P 203201-26-7P 203201-27-8P 203201-28-9P 203201-29-0P
 203201-30-3P 203201-31-4P 203201-32-5P 203201-33-6P 203201-34-7P
 203201-35-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of cyanoguanidines as interleukin-8 (IL-8) receptor antagonists)

IT 100-39-0, Benzyl bromide 103-72-0, Phenyl isothiocyanate 106-95-6,

Allyl bromide, reactions 121-88-0, 2-Hydroxy-4-nitroaniline 303-07-1,
2,6-Dihydroxybenzoic acid 1458-98-6, 3-Bromo-2-methyl-1-propene
2740-81-0, 2-Chlorophenylisothiocyanate 6590-97-2, 2,3-Dichlorophenyl
isothiocyanate 13037-60-0, 2-Bromophenyl isothiocyanate 18495-15-3
203201-48-3 203201-49-4

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of cyanoguanidines as interleukin-8 (IL-8) receptor
antagonists)

IT 2150-45-0P 74292-74-3P 203190-56-1P 203190-57-2P 203190-59-4P
203190-60-7P 203201-36-9P 203201-37-0P 203201-38-1P 203201-39-2P
203201-40-5P **203201-41-6P 203201-42-7P** 203201-43-8P
203201-44-9P 203201-45-0P 203201-46-1P **203201-47-2P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. of cyanoguanidines as interleukin-8 (IL-8) receptor
antagonists)

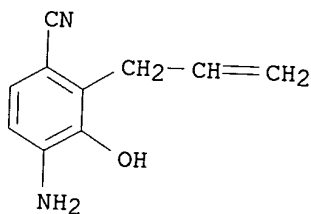
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

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IT **203201-41-6P 203201-42-7P 203201-47-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. of cyanoguanidines as interleukin-8 (IL-8) receptor
antagonists)

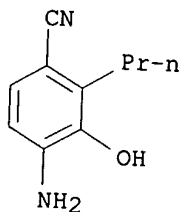
RN 203201-41-6 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy-2-(2-propenyl)- (9CI) (CA INDEX NAME)



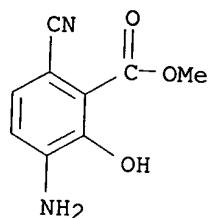
RN 203201-42-7 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy-2-propyl- (9CI) (CA INDEX NAME)



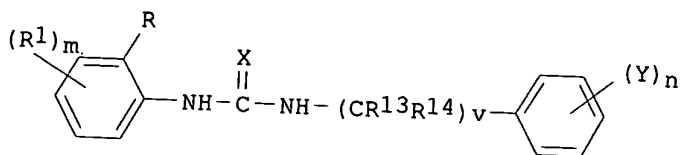
RN 203201-47-2 HCAPLUS

CN Benzoic acid, 3-amino-6-cyano-2-hydroxy-, methyl ester (9CI) (CA INDEX NAME)



L13 ANSWER 28 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1998:42247 HCAPLUS
 DN 128:110869
 TI Phenyl urea interleukin-8 receptor antagonists for treatment of
 interleukin-8-mediated diseases, and preparation thereof
 IN Widdowson, Katherine L.
 PA Smithkline Beecham Corp., USA; Widdowson, Katherine L.
 SO PCT Int. Appl., 54 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A01N037-34
 ICS A01N047-28; C07C255-00; C07C335-00; C07C273-00
 CC 1-7 (Pharmacology)
 Section cross-reference(s): 25, 63
 FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI WO 9749286 | A1 | 19971231 | WO 1997-US10900 | 19970624 |
| W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, GH, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9734994 | A1 | 19980114 | AU 1997-34994 | 19970624 |
| EP 915651 | A1 | 19990519 | EP 1997-931342 | 19970624 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| BR 9709938 | A | 19990810 | BR 1997-9938 | 19970624 |
| JP 2000514789 | T2 | 20001107 | JP 1998-503446 | 19970624 |
| ZA 9705671 | A | 19971229 | ZA 1997-5671 | 19970626 |
| US 6271261 | B1 | 20010807 | US 1998-202570 | 19981217 |
| NO 9806109 | A | 19990224 | NO 1998-6109 | 19981223 |
| KR 2000022273 | A | 20000425 | KR 1998-710693 | 19981226 |
| PRAI US 1996-20655P | P | 19960627 | | |
| WO 1997-US10900 | W | 19970624 | | |
| OS MARPAT 128:110869 | | | | |
| GI | | | | |



I

- AB Ph ureas I [X = O, S; R = functional moiety with ionizable H and pKa of 10 or less; R1 = H, halo, nitro, cyano, C1-10 alkyl, etc.; m, n = 1-3; Y = H, halo, nitro, etc.; R13, R14 = H, (substituted) C1-4 alkyl, one of R13 and R14 may be (substituted) aryl; v = 1-4] are used in the treatment of disease states mediated by the chemokine, Interleukin-8. Prepn. of e.g. N-(2-hydroxy-4-nitrophenyl)-N'-(benzyl)urea is described.
- ST phenyl urea deriv prepn IL8 disease; receptor interleukin 8 antagonist phenyl urea
- IT Chemokine receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (CXCR1; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Chemokine receptors
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (CXCR2; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Intestine, disease
 (Crohn's; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Sepsis
 (Gram.-neg.; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Interleukin 1.beta.
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (IL-1.beta. mRNA in traumatic brain injury)
- IT Anti-Alzheimer's agents
 Antiarthritics
 Antiasthmatics
 Anticoagulants
 Drug delivery systems
 Psoriasis
 (Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Chemokines
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT mRNA
 RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
 (TNF-.alpha. mRNA in traumatic brain injury)
- IT Tumor necrosis factors
 RL: BSU (Biological study, unclassified); BIOL (Biological study)

- (TNF-.alpha. mRNA in traumatic brain injury)
- IT Respiratory distress syndrome
 - (adult; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Transplant rejection
 - Transplant rejection
 - (allotransplant; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Dermatitis
 - (atopic; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Lung, disease
 - (chronic obstructive; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Drugs
 - (for chemokine-mediated diseases; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Kidney, disease
 - (glomerulonephritis; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Transplant and Transplantation
 - (graft-vs.-host reaction; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Brain
 - (hippocampus; TNF-.alpha. mRNA in traumatic brain injury)
- IT Intestine, disease
 - (inflammatory; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Reperfusion
 - (injury, cardiac and renal; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Brain
 - (parietal cortex; TNF-.alpha. mRNA in traumatic brain injury)
- IT Heart, disease
 - Kidney, disease
 - (reperfusion injury; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Shock (circulatory collapse)
 - (septic; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Brain, disease
 - (stroke; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Shock (circulatory collapse)
 - (toxic shock syndrome; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Intestine, disease
 - (ulcerative colitis; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Interleukin 8 receptors
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (.alpha.; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
- IT Interleukin 8 receptors
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(.beta.; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
 IT 118362-72-4P 201466-89-9P 201466-90-2P 201466-91-3P 201466-92-4P
 201466-93-5P 201466-94-6P 201466-95-7P 201466-96-8P 201466-97-9P
 201466-98-0P 201466-99-1P 201467-00-7P 201467-01-8P 201467-02-9P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

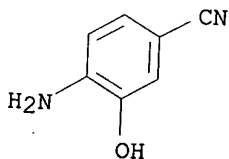
(Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
 IT 28165-60-8P, 2-Nitro-5,6-dichlorophenol 28177-79-9P,
 2-Nitro-6-cyanophenol 51586-24-4P, .alpha.-(Trifluoromethyl)benzylamine
 55204-93-8P, 2-Chlorobenzyl isocyanate 65874-91-1P 67608-57-5P,
 2-Amino-6-cyanophenol 72534-45-3P 87186-71-8P, 3-
 (Phenylsulfamido)benzonitrile 89999-90-6P 116278-69-4P,
 2-Amino-5,6-dichlorophenol 182499-81-6P 182499-82-7P 185424-21-9P
 201467-03-0P 201467-04-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)
 IT 89-97-4, 2-Chlorobenzylamine 91-00-9, Aminodiphenylmethane 99-57-0,
 2-Amino-4-nitrophenol 121-88-0, 2-Hydroxy-4-nitroaniline 124-63-0,
 Methanesulfonyl chloride 340-05-6, .alpha.-(Trifluoromethyl)benzyl
 alcohol 576-24-9, 2,3-Dichlorophenol 603-87-2, 2-Amino-6-nitrophenol
 611-20-1, 2-Cyanophenol 1548-62-5, 2-Trifluoromethyl-6-nitrophenol
 1943-82-4, Phenethyl isocyanate 2237-30-1, 3-Cyanoaniline 3173-56-6,
 Benzyl isocyanate 14649-03-7 33375-06-3 55586-26-0
 182499-74-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)

IT 55586-26-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction; Ph urea interleukin-8 receptor antagonists for treatment of interleukin-8-mediated diseases, and prepn. thereof)

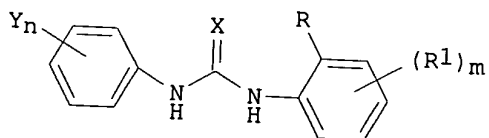
RN 55586-26-0 HCAPLUS
 CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 29 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1996:643902 HCAPLUS
 DN 125:275430
 TI Preparation of N,N'-diphenylurea derivatives as interleukin-8 receptor antagonists
 IN Widdowson, Katherine Louisa; Veber, Daniel Frank; Jurewicz, Anthony Joseph; Rutledge, Melvin Clarence, Jr.; Hertzberg, Robert Philip
 PA Smithkline Beecham Corporation, USA
 SO PCT Int. Appl., 116 pp.

CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM A61K031-17
 CC 25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 1
 FAN.CNT 4

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9625157 | A1 | 19960822 | WO 1996-US2260 | 19960216 |
| | W: JP, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 809492 | A1 | 19971203 | EP 1996-906547 | 19960216 |
| | R: BE, CH, DE, DK, FR, GB, IT, LI, NL | | | | |
| | JP 11503110 | T2 | 19990323 | JP 1996-525199 | 19960216 |
| | WO 9729743 | A1 | 19970821 | WO 1996-US13632 | 19960821 |
| | W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9669007 | A1 | 19970902 | AU 1996-69007 | 19960821 |
| | AU 725456 | B2 | 20001012 | | |
| | EP 896531 | A1 | 19990217 | EP 1996-929723 | 19960821 |
| | R: AT, ES, GR, LU, SE, MC, PT, IE, SI, LT, LV, FI | | | | |
| | CN 1215990 | A | 19990505 | CN 1996-180245 | 19960821 |
| | JP 2000504722 | T2 | 20000418 | JP 1997-529318 | 19960821 |
| | NZ 316710 | A | 20000526 | NZ 1996-316710 | 19960821 |
| | BR 9612779 | A | 20001024 | BR 1996-12779 | 19960821 |
| | US 6005008 | A | 19991221 | US 1997-894291 | 19970815 |
| | US 6211373 | B1 | 20010403 | US 1998-111663 | 19980708 |
| | NO 9803737 | A | 19981014 | NO 1998-3737 | 19980814 |
| | US 6180675 | B1 | 20010130 | US 1999-240354 | 19990129 |
| PRAI | US 1995-390260 | A2 | 19950217 | | |
| | WO 1996-US2260 | W | 19960216 | | |
| | US 1996-641990 | A3 | 19960320 | | |
| | US 1996-701299 | A3 | 19960821 | | |
| | WO 1996-US13632 | W | 19960821 | | |
| OS | MARPAT 125:275430 | | | | |
| GI | | | | | |



I

AB The title compds. [I; X = O, S; R = any functional moiety having an ionizable H and a pKa of .1 to req.10; R1, Y = H, halo, NO2, cyano, C1-10 (halo)alkyl, C2-10 alkenyl, C1-10 (halo)alkoxy, N3, HO, C1-4 hydroxyalkyl, aryl, aryl-C1-4 alkyl, aryloxy, aryl-C1-4 alkoxy, heteroaryl, heteroarylalkyl, heterocyclyl, heterocyclyl-C1-4 alkyl, heterocyclyl-C1-4 alkoxy, aryl-C2-10 alkenyl, heteroaryl-C2-10 alkenyl, (un)substituted NH2, carbamoyl, or SO3H, etc.; m, n = 1-3], which are useful for the treatment

of disease states mediated by the chemokine, interleukin-8 (IL-8) (no data), are prepd. The chemokine-mediated disease is selected from psoriasis or atopic dermatitis, asthma, chronic obstructive pulmonary disease, adult respiratory distress syndrome, arthritis, inflammatory bowel disease, Crohn's disease, ulcerative colitis, septic shock, endotoxic shock, gram neg. sepsis, toxic shock syndrome, stroke, cardiac and renal reperfusion injury, glomerulo-nephritis, thrombosis, Alzheimer's disease, graft vs. host reaction, and allograft rejections. Thus, 1.19 mmol Me 4-amino-3-hydroxybenzoate was added to a soln. of 1.19 mmol Ph isocyanate in toluene and the resulting mixt. was stirred at .apprx.80.degree. for 24-48 h to give 90% N-[2-hydroxy-4-(methoxycarbonyl)phenyl]-N'-phenylurea.

- ST phenylurea prepn interleukin 8 receptor antagonist; psoriasis treatment diphenylurea; atopic dermatitis treatment diphenylurea; asthma treatment diphenylurea; chronic obstructive pulmonary disease treatment diphenylurea; adult respiratory distress syndrome treatment diphenylurea; arthritis treatment diphenylurea; inflammatory bowel disease treatment diphenylurea; Crohn disease treatment diphenylurea; ulcerative colitis treatment diphenylurea; septic shock treatment diphenylurea; endotoxic shock treatment diphenylurea; gram neg sepsis treatment diphenylurea; toxic shock syndrome treatment diphenylurea; cardiac renal reperfusion injury treatment diphenylurea; glomerulo nephritis treatment diphenylurea; thrombosis treatment diphenylurea; Alzheimer disease treatment diphenylurea; graft vs host reaction treatment diphenylurea; allograft rejection treatment diphenylurea; stroke treatment diphenylurea
- IT Sepsis and Septicemia
(gram-neg.; prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Anticoagulants and Antithrombotics
Psoriasis
(prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Inflammation inhibitors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Mental disorder
(Alzheimer's disease, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Intestine, disease
(Crohn's, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Respiratory distress syndrome
(adult, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Transplant and Transplantation
(allo-, rejection; prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Inflammation inhibitors
(antiarthritics, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Bronchodilators
(antiasthmatics, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
- IT Dermatitis
(atopic, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Lung, disease
(chronic obstructive, prepn. of N,N'-diphenylurea derivs. as
interleukin-8 receptor antagonists for disease treatment)

IT Shock
(endotoxin, prepn. of N,N'-diphenylurea derivs. as interleukin-8
receptor antagonists for disease treatment)

IT Kidney, disease
(glomerulonephritis, prepn. of N,N'-diphenylurea derivs. as
interleukin-8 receptor antagonists for disease treatment)

IT Transplant and Transplantation
(graft-vs.-host reaction, prepn. of N,N'-diphenylurea derivs. as
interleukin-8 receptor antagonists for disease treatment)

IT Intestine, disease
(inflammatory, prepn. of N,N'-diphenylurea derivs. as interleukin-8
receptor antagonists for disease treatment)

IT Heart, disease
Kidney, disease
(injury, reperfusion; prepn. of N,N'-diphenylurea derivs. as
interleukin-8 receptor antagonists for disease treatment)

IT Lymphokine and cytokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(interleukin 8 .alpha., antagonists; prepn. of N,N'-diphenylurea
derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Lymphokine and cytokine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(interleukin 8 .beta., antagonists; prepn. of N,N'-diphenylurea derivs.
as interleukin-8 receptor antagonists for disease treatment)

IT Receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(interleukin 8, .alpha., antagonists; prepn. of N,N'-diphenylurea
derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
(Biological study); PROC (Process)
(interleukin 8, .beta., antagonists; prepn. of N,N'-diphenylurea
derivs. as interleukin-8 receptor antagonists for disease treatment)

IT Shock
(septic, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor
antagonists for disease treatment)

IT Brain, disease
(stroke, prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor
antagonists for disease treatment)

IT Shock
(toxic shock syndrome, prepn. of N,N'-diphenylurea derivs. as
interleukin-8 receptor antagonists for disease treatment)

IT 25751-87-5P 85915-46-4P 88846-90-6P 92949-89-8P 117745-32-1P
160383-78-8P 160383-79-9P 182497-99-0P 182498-03-9P 182498-07-3P
182498-11-9P 182498-15-3P 182498-18-6P 182498-20-0P 182498-22-2P
182498-25-5P 182498-26-6P 182498-28-8P 182498-30-2P 182498-31-3P
182498-32-4P 182498-33-5P 182498-34-6P 182498-35-7P 182498-38-0P
182498-40-4P 182498-42-6P 182498-44-8P 182498-45-9P 182498-46-0P
182498-47-1P 182498-48-2P 182498-50-6P 182498-52-8P 182498-54-0P
182498-55-1P 182498-57-3P 182498-59-5P 182498-62-0P 182498-63-1P
182498-64-2P 182498-65-3P 182498-66-4P 182498-67-5P 182498-68-6P
182498-69-7P 182498-70-0P 182498-71-1P 182498-72-2P 182498-73-3P

| | | | | |
|--------------|--------------|--------------|--------------|--------------|
| 182498-74-4P | 182498-75-5P | 182498-76-6P | 182498-77-7P | 182498-78-8P |
| 182498-79-9P | 182498-80-2P | 182498-81-3P | 182498-82-4P | 182498-83-5P |
| 182498-84-6P | 182498-85-7P | 182498-86-8P | 182498-87-9P | 182498-88-0P |
| 182498-89-1P | 182498-90-4P | 182498-91-5P | 182498-92-6P | 182498-93-7P |
| 182498-94-8P | 182498-95-9P | 182498-96-0P | 182498-97-1P | 182498-98-2P |
| 182498-99-3P | 182499-00-9P | 182499-01-0P | 182499-02-1P | 182499-03-2P |
| 182499-04-3P | 182499-05-4P | 182499-06-5P | 182499-07-6P | 182499-08-7P |
| 182499-09-8P | 182499-10-1P | 182499-11-2P | 182499-12-3P | 182499-13-4P |
| 182499-14-5P | 182499-15-6P | 182499-16-7P | 182499-17-8P | 182499-18-9P |
| 182499-19-0P | 182499-20-3P | 182499-21-4P | 182499-22-5P | 182499-23-6P |
| 182499-25-8P | 182499-26-9P | 182499-27-0P | 182499-28-1P | 182499-29-2P |
| 182499-30-5P | 182499-31-6P | 182499-32-7P | 182499-33-8P | 182499-34-9P |
| 182499-35-0P | 182499-36-1P | 182499-37-2P | 182499-38-3P | 182499-39-4P |
| 182499-40-7P | 182499-41-8P | 182499-42-9P | 182499-43-0P | 182499-44-1P |
| 182499-45-2P | 182499-46-3P | 182499-47-4P | 182499-48-5P | 182499-49-6P |
| 182499-50-9P | 182499-51-0P | 182499-52-1P | 182499-53-2P | 182499-54-3P |
| 182499-55-4P | 182499-56-5P | 182499-57-6P | 182499-58-7P | 182499-59-8P |
| 182499-60-1P | 182499-61-2P | 182499-62-3P | 182499-63-4P | 182499-64-5P |
| 182499-65-6P | 182499-66-7P | 182499-67-8P | 182499-68-9P | 182499-69-0P |
| 182499-70-3P | 182499-71-4P | 182499-72-5P | 182501-57-1P | 182700-31-8P |

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT 86-84-0, 1-Naphthyl isocyanate 87-17-2, 2-Phenylaminocarbonylphenol
88-67-5, 2-Iodobenzoic acid 90-43-7, 2-Phenylphenol 91-93-0 95-54-5,
o-Phenylenediamine, reactions 95-55-6, 2-Aminophenol 98-09-9,
Phenylsulfonyl chloride 98-17-9, .alpha.,.alpha.,.alpha.-Trifluoro-m-
cresol 99-56-9, 4-Nitro-1,2-phenylenediamine 99-57-0,
5-Nitro-2-hydroxyaniline 100-46-9, Benzylamine, reactions 103-71-9,
Phenyl isocyanate, reactions 106-40-1, 4-Bromoaniline 116-63-2
117-77-1, 2-Hydroxy-3-aminoanthraquinone 117-99-7 121-51-7,
3-Nitrobenzenesulfonyl chloride 121-60-8, 4-Acetamidophenylsulfonyl
chloride 121-88-0, 2-Amino-5-nitrophenol 124-38-9, Carbon dioxide,
reactions 137-07-5, 2-Aminothiophenol 274-09-9, 1,3-Benzodioxole
320-76-3 329-01-1, 3-Trifluoromethylphenyl isocyanate 385-01-3,
2-Nitro-3-fluorophenol 394-31-0, 2-Amino-5-hydroxybenzoic acid
394-33-2, 4-Fluoro-2-nitrophenol 400-98-6, 4-Amino-3-
nitrobenzotrifluoride 444-30-4, 2-Trifluoromethylphenol 446-36-6,
5-Fluoro-2-nitrophenol 463-71-8, Thiophosgene 534-85-0,
2-Hydroxy-3-aminobenzoic acid 544-92-3, Copper(I) cyanide 570-23-0,
2-Anilinoaliline 576-24-9, 2,3-Dichlorophenol 580-51-8, 3-Phenylphenol
603-87-2, 2-Hydroxy-3-nitroaniline 609-89-2, 4,6-Dichloro-2-nitrophenol
611-20-1, 2-Cyanophenol 614-68-6, 2-Methylphenyl isocyanate 615-36-1,
2-Bromoaniline 618-45-1, 3-Isopropylphenol 620-17-7, 3-Ethylphenol
644-35-9, 2-Propylphenol 700-87-8, 2-Methoxyphenyl isocyanate
776-04-5, 2-(Trifluoromethyl)benzenesulfonyl chloride 837-95-6,
2-Nitro-4-(trifluoromethyl)benzenesulfonyl chloride 873-62-1,
3-Cyanophenol 1548-13-6, 4-Trifluoromethylphenyl isocyanate 1592-00-3,
2-Bromophenyl isocyanate 1623-92-3, 4-Phenoxyphenylsulfonyl chloride
1762-95-4, Ammonium thiocyanate 1899-93-0, 3-Methylbenzenesulfonyl
chloride 1939-99-7, Benzylsulfonyl chloride 2237-30-1, 3-Cyanoaniline
2243-42-7, 2-Phenoxybenzoic acid 2285-12-3, 2-Trifluoromethylphenyl
isocyanate 2374-03-0, 3-Hydroxy-4-aminobenzoic acid 2493-02-9,
4-Bromophenyl isocyanate 2612-57-9, 2,4-Dichlorophenyl isocyanate
2834-92-6, 1-Amino-2-hydroxynaphthalene 2835-98-5, 2-Hydroxy-4-
methylaniline 3272-08-0, 2-Nitro-4-cyanophenol 3320-83-0,

2-Chlorophenyl isocyanate 3320-86-3, 2-Nitrophenyl isocyanate 3470-49-3, 5-Hydroxy-1-indanone 4091-26-3, Styrylsulfonyl chloride 5395-71-1, 2-Ethoxyphenyl isocyanate 5417-63-0, 3-Amino-2-hydroxynaphthalene 6344-59-8, 1-Hydroxy-2-nitrofluorene 7664-41-7, Ammonia, reactions 13020-57-0, 3-Hydroxybenzophenone 13360-57-1, Dimethylsulfamoyl chloride 14755-02-3 16629-19-9, 2-Thiophenesulfonyl chloride 16744-98-2, 2-Fluorophenyl isocyanate 17337-13-2, 2-Phenylphenyl isocyanate 17573-92-1, 3-Methoxythiophene 17802-02-7, 3-Chloro-2-nitrophenol 18162-48-6, tert-Butyldimethylsilyl chloride 18493-15-7 18704-37-5, 8-Quinolinesulfonyl chloride 18908-07-1, 3-Methoxyphenyl isocyanate 20513-43-3 21286-54-4, (+)-10-Camphorsulfonyl chloride 23095-31-0, 3,4-Dimethoxyphenylsulfonyl chloride 24615-22-3 26386-88-9, Diphenylphosphoryl azide 26628-22-8, Sodium azide 32315-10-9, Triphosgene 35821-29-5 39234-86-1 39262-22-1, (-)-10-Camphorsulfonyl chloride 40398-01-4, 2-Chloro-6-methylphenyl isocyanate 40411-25-4, 2-Ethylphenyl isocyanate 41195-90-8, 2,3-Dichlorophenyl isocyanate 43115-40-8, 2-Amino-4-(ethylsulfonyl)phenol 52260-30-7, 2-Methylthiophenyl isocyanate 55076-90-9, 2,4-Dibromophenyl isocyanate 63435-16-5, Methyl 4-amino-3-hydroxybenzoate 65295-69-4, 2,6-Difluorophenyl isocyanate 69812-29-9, 2-Acetamido-4-methyl-5-thiazolesulfonyl chloride 82419-26-9, 2,3-Difluoro-6-nitrophenol 93254-81-0, 2-Benzoyloxybenzophenone 99968-81-7, 3-Iodo-2-hydroxyaniline 126714-85-0, 2,3-Dichlorothiophene-5-sulfonyl chloride 146224-62-6, 5-Aminocarbonyl-2-aminophenol 182500-26-1, 2-Trifluoromethoxyphenyl isocyanate 182500-27-2, 2-Amino-5,6-diphenylphenol 182500-28-3, 2-Nitro-5-methyl-4-bromophenol 182500-29-4 182500-30-7, 3,5,6-Trifluoro-2-hydroxyaniline 182500-31-8, 4-Trifluoromethyl-3-fluoro-2-hydroxyaniline 183513-64-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)
IT 386-72-1P, 2-Nitro-3-trifluoromethylphenol 399-97-3P, 2-Amino-4-fluorophenol 400-99-7P, 2-Nitro-4-trifluoromethylphenol 454-81-9P, 2-Amino-4-trifluoromethylphenol 527-62-8P, 2-Amino-4,6-dichlorophenol 1214-44-4P, 2-Amino-6-(phenylaminocarbonyl)phenol 4291-30-9P, 2-Nitro-6-phenylphenol 4363-03-5P, 2-Amino-5-phenylphenol 5768-39-8P, 2,3-Methylenedioxybenzoic acid 6236-69-7P 7256-03-3P, 2-Amino-1-hydroxyfluorene 14543-43-2P, 2-Amino-4-cyanophenol 15864-32-1P 18062-89-0P, 2-Nitro-5-phenylphenol 18495-15-3P, 2-Nitro-5-cyanophenol 28165-60-8P, 2-Nitro-5,6-dichlorophenol 28177-79-9P, 2-Nitro-6-cyanophenol 31684-63-6P, 4-Amino-3-hydroxybenzophenone 43200-31-3P, 2-(Phenylsulfamido)aniline 43200-46-0P 53442-24-3P, 2-Amino-6-phenylphenol 53981-23-0P, 2-Amino-3-fluorophenol 53981-24-1P, 2-Amino-5-fluorophenol 55586-26-0P, 2-Amino-5-cyanophenol 56962-00-6P, 2-Amino-3-chlorophenol 60166-83-8P, 3-Methoxy-2-thiophenecarboxylic acid 63450-94-2P 67608-57-5P, 2-Amino-6-cyanophenol 68507-91-5P, 2-Nitro-6-(phenylaminocarbonyl)phenol 86981-08-0P 87186-71-8P, 3-(Phenylsulfamido)benzonitrile 87376-34-9P 92554-96-6P, 2-(8-Quinolinylnsulfonylamino)aniline 101664-28-2P, 2-Nitro-6-ethylphenol 106877-48-9P, 2-Amino-3-trifluoromethylphenol 115023-64-8P, 2-Nitro-6-propylphenol 115023-65-9P, 2-Amino-6-propylphenol 11551-33-2P, 2-Hydroxy-3,4-difluoroaniline 116278-69-4P, 2-Amino-5,6-dichlorophenol 139729-85-4P, 2-Amino-5-isopropylphenol 153506-06-0P, 2-Nitro-5-isopropylphenol 182499-74-7P, 2-tert-Butyldimethylsilyloxy-5-nitrophenol 182499-76-9P 182499-78-1P 182499-79-2P 182499-80-5P, Bis(3-bromo-6-aminophenyl) disulfide 182499-81-6P, 4-Nitro-3-(phenylsulfamido)benzonitrile 182499-82-7P,

4-Amino-3-(phenylsulfamido)benzonitrile 182499-83-8P,
 2-(Styrylsulfamido)aniline 182499-84-9P 182499-85-0P,
 2-(2-Thiophenesulfamido)aniline 182499-86-1P, 2-(3-Tolylsulfonamido)aniline 182499-87-2P, 2-(Benzylsulfonamido)aniline
 182499-88-3P 182499-89-4P, 2-Amino-6-fluoro-4-bromophenol
 182499-90-7P, 2-Amino-6-ethylphenol 182499-91-8P, 2-Nitro-5-methyl-6-bromophenol 182499-92-9P, 2-Nitro-5-methyl-6-cyanophenol 182499-93-0P,
 2-Amino-5-methyl-6-cyanophenol 182499-94-1P, 4-Nitro-3-hydroxybenzophenone 182499-95-2P, 3-Nitro-2-hydroxybenzophenone
 182499-96-3P, 3-Amino-2-hydroxybenzophenone 182499-97-4P,
 2-Nitro-6-benzyloxyphenol 182499-98-5P, 2-Amino-6-benzyloxyphenol
 182499-99-6P 182500-00-1P 182500-01-2P 182500-02-3P 182500-03-4P
 182500-04-5P 182500-05-6P 182500-06-7P 182500-07-8P 182500-08-9P
 182500-09-0P 182500-10-3P 182500-11-4P 182500-12-5P 182500-13-6P,
 2-(Phenethylsulfonamido)aniline 182500-14-7P 182500-15-8P
 182500-16-9P 182500-17-0P 182500-18-1P 182500-19-2P 182500-20-5P
 182500-21-6P 182500-22-7P 182500-23-8P 182500-24-9P 182500-25-0P
 182700-32-9P 182700-33-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

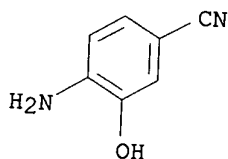
(prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

IT 55586-26-0P, 2-Amino-5-cyanophenol
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of N,N'-diphenylurea derivs. as interleukin-8 receptor antagonists for disease treatment)

RN 55586-26-0 HCAPLUS

CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 30 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1995:790895 HCAPLUS
 DN 123:246605
 TI In Vivo and in Vitro Studies on the Neurotoxic Potential of
 6-Hydroxydopamine Analogs
 AU Ma, Su; Lin, Lorrie; Raghavan, R.; Cohenour, Pat; Lin, Peter Y. T.;
 Bennett, Jennifer; Lewis, Russell J.; Enwall, Eric L.; Kostrzewa, Richard;
 et al.
 CS Department of Chemistry Biochemistry, University of Oklahoma, Norman, OK,
 73019, USA
 SO Journal of Medicinal Chemistry (1995), 38(20), 4087-97
 CODEN: JMCMAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 CC 1-11 (Pharmacology)
 Section cross-reference(s): 4, 25
 AB To det. which phys. and biol. properties could best be correlated with

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

neurotoxic potential, seven analogs of 1-(2,4,5-trihydroxyphenyl)-2-aminoethane (1), better known as 6-hydroxydopamine, were synthesized and compared to 1 in a variety of ways both in vivo and in vitro. The analogs, in combination with the std. 1, include all eight of the 2,4,5-trisubstituted-Ph derivs. of phenethylamine and .alpha.-methylphenethylamine in which the substitution is of the trihydroxy or aminodihydroxy form. Low (60 nmol) and high (300 nmol) intracerebroventricular doses of all analogs produced long-term (7 day) redn. of mouse whole brain norepinephrine (NE) and lesser depletions of dopamine (DA), and effects on serotonin were varied. The analog 1-(5-amino-2,4-dihydroxyphenyl)-2-aminopropane (8) was both more complete and more selective than the std. 1 in depleting NE. Using a histofluorometric glyoxylic acid method and Fink-Heimer silver degeneration stain, it was detd. that overt neural degeneration was produced by 8. In vitro, the ease of oxidn. of the eight analogs was represented by a formal potential range of -130 to -212 mV vs. SCE. However, there was no obvious relation between ease of oxidn. and the extent of monoamine depletion from mouse brain. Using kinetic anal. of synaptosomal accumulation of [3H]NE and [3H]DA, it was found that the std. 1 is more potent in its interaction with the DA uptake site ($K_i = 12$.mu.M) than the NE uptake site ($K_i = 51$.mu.M). A correlation anal. was used to det. that differences in NE and DA depletion by each analog could not be explained by differences in potency for in vitro uptake blockade. However, there was a correlation between the K_i for [3H]NE uptake blockade and the EC50 for synaptosomal release of preloaded [3H]NE for the eight analogs ($R^2 = 0.96$; for log:log plot, $R^2 = 0.54$), indicating that the results for these two in vitro tests both reflect interaction with the same NE neuronal membrane transport site. A similar correlation between K_i and EC50 was shown for all eight analogs using [3H]DA ($R^2 = 0.92$; for log:log plot, $R^2 = 0.52$), indicating interaction with the same DA neuronal membrane transport site. These findings demonstrate that there is no single property that can account for selectivity of action and/or potency of catecholamine neurotoxins related to 6-hydroxydopamine.

ST

IT

Biological transport
Brain

(in vivo and in vitro studies on the neurotoxic potential of
6-hydroxydopamine analogs)

IT

Amines, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(mono-, in vivo and in vitro studies on the neurotoxic potential of
6-hydroxydopamine analogs)

IT

Toxicity

(neurotoxicity, in vivo and in vitro studies on the neurotoxic
potential of 6-hydroxydopamine analogs)

IT

1199-18-4D, 6-Hydroxydopamine, analogs

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(in vivo and in vitro studies on the neurotoxic potential of
6-hydroxydopamine analogs)

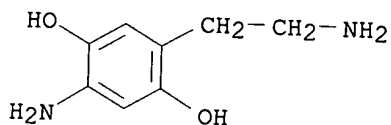
IT

38411-80-2P 41241-36-5P **41241-40-1P** 41241-41-2P
106868-44-4P 168699-63-6P **168699-64-7P**

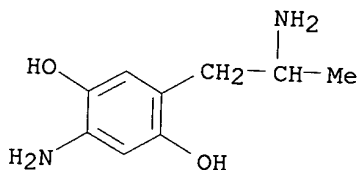
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(in vivo and in vitro studies on the neurotoxic potential of

6-hydroxydopamine analogs)
 IT 50-67-9, Serotonin, biological studies 51-41-2, Norepinephrine
 51-61-6, Dopamine, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (in vivo and in vitro studies on the neurotoxic potential of
 6-hydroxydopamine analogs)
 IT 125903-70-0P 168699-65-8P 168699-66-9P 168699-67-0P 168699-68-1P
 168699-69-2P 168699-70-5P 168699-71-6P 168699-72-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (in vivo and in vitro studies on the neurotoxic potential of
 6-hydroxydopamine analogs)
 IT **41241-40-1P 168699-64-7P**
 RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
 effector, except adverse); BSU (Biological study, unclassified); SPN
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (in vivo and in vitro studies on the neurotoxic potential of
 6-hydroxydopamine analogs)
 RN 41241-40-1 HCAPLUS
 CN 1,4-Benzenediol, 2-amino-5-(2-aminoethyl)- (9CI) (CA INDEX NAME)



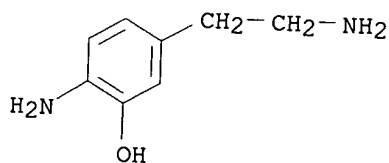
RN 168699-64-7 HCAPLUS
 CN 1,4-Benzenediol, 2-amino-5-(2-aminopropyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 31 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1991:628991 HCAPLUS
 DN 115:228991
 TI The neuromelanin of the human substantia nigra
 AU Carstam, Ragnar; Brinck, Carita; Hindemith-Augustsson, Annika; Rorsman,
 Hans; Rosengren, Evald
 CS Dep. Dermatol., Univ. Lund, Lund, S-221 85, Swed.
 SO Biochimica et Biophysica Acta (1991), 1097(2), 152-60
 CODEN: BBACAQ; ISSN: 0006-3002
 DT Journal
 LA English
 CC 13-1 (Mammalian Biochemistry)
 AB The pigment of the human substantia nigra was isolated after extn. of
 lipids and proteins with 2% sodium cholate in 30% EtOH followed by 2% SDS
 in 10% glycerol. The pigment was hydrolyzed with HI or degraded by
 treatment with KMNO4 and the samples were examd. for compds. known to

derive from pheomelanin (4-amino-3-hydroxyphenylalanine, AHP and 4-amino-3-hydroxyphenylethylamine, AHPEA), or from eumelanin (pyrrole-2,3,5-tricarboxylic acid, PTCA). The HI hydrolysis yielded AHPEA in large quantities, indicating cysteinyl dopamine as the main source of the pheomelanin moiety of the neuromelanin, but also trace amts. of AHP, derived from cysteinyl dopa oxidn. products. Dopamine and small quantities of dopa were also obtained by HI hydrolysis of the neuromelanin. The yield of PTCA was low, but the amts. obsd. show that part of the neuromelanin is of the eumelanin type, a fact compatible with an occasional exhaustion of the glutathione-cysteine redn. system at the site of neuromelanin formation.

- ST brain substantia nigra neuromelanin; melanin brain substantia nigra;
IT pheomelanin brain substantia nigra; eumelanin brain substantia nigra
IT Neuromelanins
RL: PRP (Properties)
(compn. of, in human brain substantia nigra)
IT Pheomelanins
RL: BIOL (Biological study)
(of brain substantia nigra, of human, compn. of)
IT Melanins
RL: BIOL (Biological study)
(eu-, of brain substantia nigra, of human, compn. of)
IT Brain, composition
(substantia nigra, neuromelanin of, compn. of, in human)
IT 19641-92-0, Cysteinyl dopa 99558-89-1
RL: BIOL (Biological study)
(neuromelanin formation from, in human brain substantia nigra)
IT **104083-77-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT **104083-77-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 104083-77-4 HCAPLUS
CN Phenol, 2-amino-5-(2-aminoethyl)- (9CI) (CA INDEX NAME)

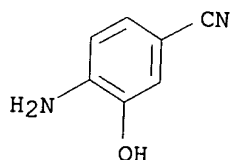


- L13 ANSWER 32 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1989:544155 HCAPLUS
DN 111:144155
TI Positive-type photosensitive lithographic plates
IN Kobayashi, Yoshiko; Tomiyasu, Hiroshi; Goto, Sei; Nakai, Hideyuki
PA Mitsubishi Kasei Corp., Japan; Konica Co.
SO Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03C001-72
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

FAN.CNT 1

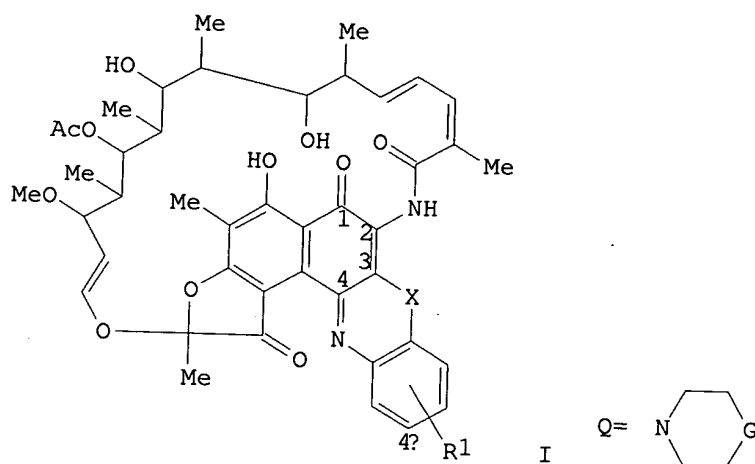
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|----------------------|--------------|-----------------|-------------|
| PI | JP 01021440 | A2 | 19890124 | | |
| PRAI | JP 1987-178727 | | 19870717 | JP 1987-178727 | 19870717 |
| AB | The title plates having good chem. resistance and capable of UV ink printing even without burning contain, on a support, a photosensitive layer contg. an o-naphthoquinonediazide sulfonic acid ester and polymer (residual monomer content (<10%) of -CR1R2CR3(CONHR4XmYOH)- (R1, R2 = H, halogen, alkyl, aryl, carboxy; R3 = H, halogen, alkyl, aryl; R4 = H, alkyl, aryl, aralkyl; Y = (un)substituted arom. group; X = divalent org. group; m = 0-5]. | | | | |
| ST | hydroxy vinyl amide polymer lithog; lithog plate photosensitive resin; naphthoquinonediazidesulfonate photosensitizer lithog plate | | | | |
| IT | Lithographic plates (pos.-working, chem.-resistant, photosensitive hydroxymethacrylamide or hydroxymethacryl naphthalenamide copolymer-based, contg. naphthoquinonediazidesulfonate photosensitizer) | | | | |
| IT | 19243-95-9P | 27931-11-9P | 117646-95-4P | | |
| | RL: IMF (Industrial manufacture); PREP (Preparation) (manuf. and polymn. of) | | | | |
| IT | 68510-93-0 | 84135-66-0 | | | |
| | RL: USES (Uses) (photosensitizers, in pos.-working lithog. plates) | | | | |
| IT | 68584-99-6 | 115111-30-3 | 115111-33-6 | 117646-96-5 | 119417-67-3 |
| | RL: USES (Uses) (pos.-working photosensitive lithog. plates contg., chem.-resistant) | | | | |
| IT | 920-46-7 | Methacrylyl chloride | | | |
| | RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with hydroxy aniline and hydroxy naphthylamine) | | | | |
| IT | 83-55-6 | 123-30-8 | 55586-26-0 | | |
| | RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with methacrylyl chloride) | | | | |
| IT | 55586-26-0 | | | | |
| | RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with methacrylyl chloride) | | | | |
| RN | 55586-26-0 | HCAPLUS | | | |
| CN | Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME) | | | | |



L13 ANSWER 33 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1989:57408 HCAPLUS
 DN 110:57408
 TI Preparation of rifamycin derivatives as antibiotics
 IN Yamane, Takehiko; Kondo, Hideo; Fuse, Yoshihide; Hashizume, Takushi; Kano, Fumihiko; Yamashita, Katsuji; Hosoe, Kazunori; Watanabe, Kiyoshi
 PA Kanegafuchi Chemical Industry Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C07D498-18
 ICS A61K031-535; A61K031-54; C07D513-18
 CC 26-5 (Biomolecules and Their Synthetic Analogs)
 Section cross-reference(s): 1
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|-----------------|----------|
| PI | JP 63045282 | A2 | 19880226 | JP 1987-78994 | 19870331 |
| PRAI | JP 1986-85815 | | 19860414 | | |
| OS | MARPAT 110:57408 | | | | |
| GI | | | | | |



- AB The title compds. I [X = O, S; R1 = CHO, C1-4 acyl, (CH2)mZ (wherein m = 1-4, Z = H, cyano, C1-3 alkoxy, C1-4 acyl, etc.), Q, etc.; G = CH2, CO], useful as antibiotics, were prepd. A mixt. of rifamycin S and 2-amino-4-trifluoromethylphenol in PhMe was stirred at 60.degree. for 16 h. After evapn. of PhMe, the residue was stirred with MnO2 in EtOH at room temp. for 21 h to give I (X = O, R1 = 4'-CF3) (II). II in vitro exhibited a MIC of 0.16 .mu.g/mL against Micrococcus luteus IFO 12708.
- ST rifamycin deriv prepn antibiotic
- IT 13553-79-2, Rifamycin S
- RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclocondensation of, with aminophenol deriv.)
- IT 454-81-9, 2-Amino-4-trifluoromethylphenol
- RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclocondensation of, with rifamycin S)
- IT 52820-13-0P, 3-Amino-4-hydroxybenzyl alcohol 54255-50-4P 114484-31-0P, 4-Amino-3-hydroxybenzyl alcohol 118172-66-0P, 2-Amino-4-(2-hydroxyethyl)phenol 118172-67-1P 118172-69-3P, 2-Amino-4-(methoxymethyl)phenol 118172-71-7P 118172-72-8P **118172-74-0P**
- RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. and cyclocondensation of, with rifamycin S)
- IT 41833-13-0P, 4-Hydroxy-3-nitrobenzyl alcohol 61161-83-9p, 3-Hydroxy-4-nitrobenzyl alcohol

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and hydrogenation of)

IT 6322-56-1P 63367-08-8P 118172-64-8P 118172-65-9P 118172-68-2P
118172-70-6P 118172-73-9P 118172-76-2P 118172-77-3P 118473-03-3P
118473-04-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, in prepn. of rifamycin antibiotics)

IT 6998-60-3DP, Rifamycin, derivs.

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

IT 114484-11-6P 114484-12-7P 114494-69-8P 114669-09-9P 114682-25-6P
118172-39-7P 118172-40-0P 118172-41-1P 118172-42-2P 118172-43-3P
118172-44-4P 118172-45-5P 118172-46-6P 118172-47-7P 118172-48-8P
118172-49-9P 118172-50-2P 118172-51-3P 118172-52-4P 118172-53-5P
118172-54-6P 118172-55-7P 118172-56-8P 118172-57-9P 118172-58-0P
118172-59-1P 118172-60-4P 118172-61-5P 118172-62-6P 118172-63-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of, as antibiotic)

IT 99-93-4, p-Hydroxyacetophenone 501-94-0 704-13-2 5355-17-9,
p-Methoxymethylphenol 5471-51-2 7483-41-2 14191-95-8 16588-34-4,
4-Chloro-3-nitrobenzaldehyde 55912-20-4, 4-Chloro-3-nitrobenzyl alcohol
57375-25-4, 3-Bromorifamycin S

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of rifamycin antibiotic)

IT 704-13-2, 3-Hydroxy-4-nitrobenzaldehyde 3011-34-5, 4-Hydroxy-3-nitrobenzaldehyde

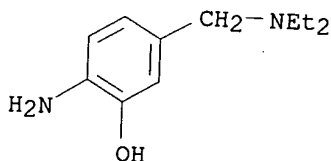
RL: RCT (Reactant); RACT (Reactant or reagent)
(redn. of)

IT **118172-74-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and cyclocondensation of, with rifamycin S)

RN 118172-74-0 HCAPLUS

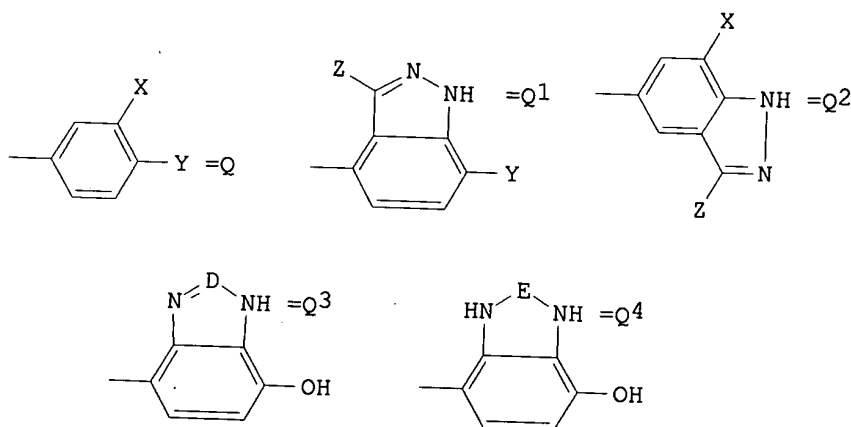
CN Phenol, 2-amino-5-[(diethylamino)methyl]- (9CI) (CA INDEX NAME)



L13 ANSWER 34 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1987:50224 HCAPLUS
DN 106:50224
TI Dopamine derivatives and their use as medicinal products
IN Schoellkopf, Klaus; Albrecht, Rudolf; Lehmann, Manfred; Schroeder, Gertrud
PA Schering A.-G., Fed. Rep. Ger.
SO PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DT Patent

LA German
 IC ICM C07D231-56
 ICS C07D235-06; C07D235-08; C07D235-10; C07D235-26; C07D235-30;
 C07D235-28; C07D249-18; C07D285-12; C07C103-44; C07C127-19;
 A61K031-415; A61K031-41; A61K031-135
 CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 8601204 | A1 | 19860227 | WO 1985-DE275 | 19850814 |
| | W: AU, DK, JP, US | | | | |
| | RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| | DE 3430310 | A1 | 19860227 | DE 1984-3430310 | 19840815 |
| | DE 3525563 | A1 | 19870115 | DE 1985-3525563 | 19850715 |
| | AU 8546777 | A1 | 19860307 | AU 1985-46777 | 19850814 |
| | AU 592765 | B2 | 19900125 | | |
| | JP 62500168 | T2 | 19870122 | JP 1985-503646 | 19850814 |
| | AT 76639 | E | 19920615 | AT 1985-904092 | 19850814 |
| | DK 8601687 | A | 19860414 | DK 1986-1687 | 19860414 |
| | US 4958026 | A | 19900918 | US 1986-867365 | 19860530 |
| PRAI | DE 1984-3430310 | | 19840815 | | |
| | DE 1985-3525563 | | 19850715 | | |
| | EP 1985-904092 | | 19850814 | | |
| | WO 1985-DE275 | | 19850814 | | |
| OS | CASREACT 106:50224 | | | | |
| GI | | | | | |



AB Dopamine analogs R1R2NCH2CH2A (A = Q, Q1, Q2, Q3, Q4; R1, R2 = H, C1-5 alkyl, allyl; D = CR4, N; R4 = H, C1-4 alkyl, CF3, NH2; E = CO, CS, SO2; X = OH, NH2, NHCOR3, NHCONH2, NHSO2CF3; Y = OH, NH2, NHCOR3, NHCONH2, NHSO2CF3, NHSO2Me; X .noteq. Y when either = OH; R3 = C1-4 alkyl; Z = H, OH), useful as antihypertensives, were prepd. 3,4-H2NCH2CH2C6H3(OH)NHCHO (I) was prepd. in 8 steps from 3,4-O2N(OH)C6H3CHO and PhCH2Cl. In 60 min after Bolus injection in spontaneously hypertensive rats, 10 mg/kg I decreased blood pressure 22% (also max. value), whereas 0.3 mg/kg N,N-dipropyldopamine-HBr infused over 20 min gave max. 15% decrease, with

0% after 20 and 60 min.
 ST antihypertensive dopamine analog prepn
 IT Antihypertensives
 (dopamine analogs)
 IT 100-46-9, reactions 124-02-7, Diallylamine
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (amidation by, of indazolylacetic acid deriv.)
 IT 141-75-3 358-23-6, Trifluoromethanesulfonic acid anhydride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (amidation of)
 IT 75-52-5, Nitromethane, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation of, with benzimidazolonecarboxaldehyde deriv.)
 IT 123-38-6, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation of, with phenylethylamine deriv.)
 IT 61873-94-7
 RL: PROC (Process)
 (conversion of, to acid chloride)
 IT 7803-58-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization of, with diaminobenzene deriv.)
 IT 609-09-6, Diethyl mesoxalate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization of, with methoxyaniline deriv.)
 IT 76-05-1, Trifluoroacetic acid, reactions 109-52-4, Valeric acid,
 reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclocondensation of, with aminoaniline deriv.)
 IT 100-44-7, Benzyl chloride, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (etherification by, of hydroxynitrobenzaldehyde)
 IT 700-38-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (etherification of, with benzyl chloride)
 IT 69053-51-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (formylation of)
 IT 106222-33-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (nitrosation and cyclization of)
 IT 104102-89-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and acylation by, of dipropylamine)
 IT 104103-03-9P 104103-17-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and acylation of)
 IT 104083-57-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn. and amidation of)
 IT 106222-39-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and condensation of, with nitromethane)
 IT 106221-93-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and condensation of, with propionaldehyde)
IT 104103-11-9P 106222-02-0P 106222-05-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and cyclization of)
IT 104103-20-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and cyclization of, with di-Et mesoxalate)
IT 96886-48-5P 103544-39-4P 104083-40-1P 104083-45-6P 104083-64-9P
104103-26-6P 104103-31-3P 104103-34-6P 106222-08-6P 106222-09-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and debenzoylation of)
IT 104083-47-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and elimination reaction or hydrogenation of)
IT 101389-63-3P 104083-70-7P 106222-13-3P 106222-16-6P 106222-19-9P
106222-22-4P 106222-26-8P 106222-28-0P 106222-31-5P 106222-34-8P
106222-36-0P 106222-42-8P
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and ether cleavage of)
IT 3011-34-5P, 4-Hydroxy-3-nitrobenzaldehyde
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and etherification of)
IT 104102-91-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and formylation or acylation of)
IT 104083-54-7P 104083-68-3P 104102-88-7P 104102-94-5P 104102-95-6P
104103-02-8P 104103-04-0P 104103-09-5P 104103-19-7P 106222-04-2P
106222-40-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and hydrogenation of)
IT 104102-96-7P
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and hydrogenation or debenzoylation and acylation of)
IT 104083-56-9P 104083-66-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and hydrolysis of)
IT 104103-23-3P 104138-91-2P
RL: SPN (Synthetic preparation); PREP (Preparation)

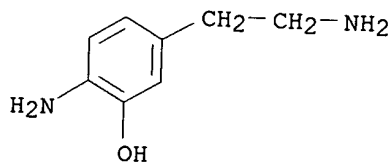
(prepn. and hydrolysis or ether cleavage of)
IT 104103-10-8P 104103-22-2P 106221-92-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and nitrosation and cyclization of)
IT 106221-91-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and reaction of, with (dimethylamino)ethylnitroindazole deriv.)
IT 106221-96-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

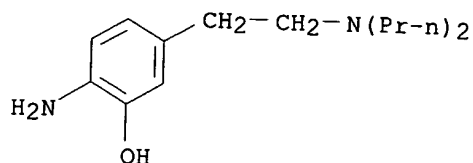
(prepn. and reaction of, with dipropylamine)
IT 104102-99-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with hydroxylaminesulfonic acid)
IT 106221-98-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with potassium tert-butoxide)
IT 104102-93-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with sodium cyanide)
IT 104102-92-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with thionyl chloride)
IT 104102-98-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with tert-butoxybis(dimethylamino)methane)
IT 104103-01-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction with propionaldehyde or hydrogenation of)
IT 22955-07-3P, 4-(Benzyloxy)-3-nitrobenzaldehyde 104083-58-1P
104083-61-6P 104083-63-8P 104102-90-1P 104103-00-6P 104103-05-1P
104103-07-3P 104103-16-4P, (3-Methoxy-4-nitrophenyl)acetonitrile
106221-99-2P 106222-01-9P 106222-03-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of)
IT 104103-21-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and ring cleavage of)
IT 104102-97-8P 106222-00-8P 106235-58-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT 81666-88-8P 101389-53-1P 101389-54-2P 101566-34-1P 103544-40-7P
104083-39-8P 104083-41-2P **104083-43-4P** 104083-44-5P
104083-46-7P 104083-49-0P 104083-50-3P 104083-51-4P 104083-52-5P
104083-53-6P 104083-55-8P 104083-59-2P 104083-60-5P 104083-62-7P
104083-65-0P 104083-67-2P 104083-69-4P 104083-71-8P 104083-72-9P
104083-73-0P 104083-74-1P **104083-75-2P** 104083-76-3P
104083-77-4P 104083-78-5P 104083-79-6P 104083-80-9P
104083-81-0P 104083-82-1P 104083-83-2P 104083-84-3P 104083-85-4P
104083-86-5P 104083-87-6P 104083-88-7P 104083-90-1P 104083-91-2P
104083-93-4P 104103-15-3P 104103-18-6P 104103-25-5P 104103-29-9P
104103-30-2P **104103-32-4P** 104103-33-5P 104104-11-2P
106221-94-7P 106222-06-4P 106222-07-5P 106222-10-0P 106222-11-1P
106222-12-2P 106222-14-4P 106222-15-5P 106222-17-7P 106222-18-8P
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106222-29-1P 106222-30-4P 106222-32-6P 106222-35-9P 106222-37-1P
106222-38-2P 106222-41-7P 106222-44-0P 106235-59-0P 106235-60-3P
106235-61-4P 106235-62-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of, as antihypertensive)
 IT 104083-48-9p
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as antihypertensive)
 IT 51-61-6DP, Dopamine, analogs
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as antihypertensives)
 IT 5815-08-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with (benzyloxy)nitrotoluene)
 IT 420-04-2 530-62-1, N,N'-Carbonyldiimidazole 6160-65-2,
 N,N'-Thiocarbonyldiimidazole
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with benzenediamine deriv.)
 IT 27077-78-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with bis(dimethylamino)-tert-butoxymethane)
 IT 6282-00-4, N,N-Dipropylformamide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with di-Me sulfate)
 IT 77-78-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with dipropylformamide)
 IT 865-47-4, Potassium tert-butoxide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with formamidine Me sulfate)
 IT 38512-82-2, 5-Methyl-2-nitroanisole 104103-06-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with tert-butoxybis(dimethylamino)methane)
 IT 142-84-7, Dipropylamine
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactions of)
 IT 81654-50-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (ring cleavage of)
 IT 104083-43-4P 104083-75-2P 104083-77-4P
 104103-32-4P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of, as antihypertensive)
 RN 104083-43-4 HCAPLUS
 CN Phenol, 2-amino-5-(2-aminoethyl)-, hydrochloride (9CI) (CA INDEX NAME)

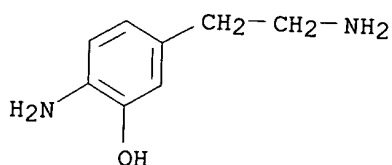


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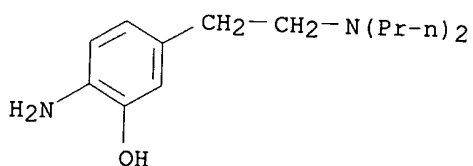
RN 104083-75-2 HCAPLUS
CN Phenol, 2-amino-5-[2-(dipropylamino)ethyl]- (9CI) (CA INDEX NAME)



RN 104083-77-4 HCAPLUS
CN Phenol, 2-amino-5-(2-aminoethyl)- (9CI) (CA INDEX NAME)



RN 104103-32-4 HCAPLUS
CN Phenol, 2-amino-5-[2-(dipropylamino)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



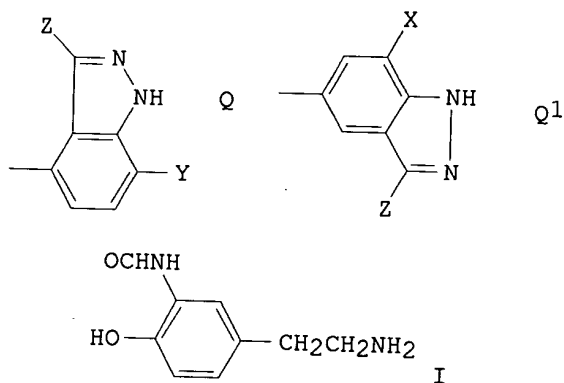
● 2 HCl

L13 ANSWER 35 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1986:572181 HCAPLUS
DN 105:172181
TI Dopamine derivatives
IN Albrecht, Rudolf; Lehmann, Manfred; Schroeder, Gertrud
PA Schering A.-G., Fed. Rep. Ger.
SO Ger. Offen., 45 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C07D231-54
ICS A61K031-135; A61K031-17; A61K031-41
CC 26-9 (Biomolecules and Their Synthetic Analogs)
Section cross-reference(s): 1
FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. DATE

| | | | | | |
|------|---|----|----------|-----------------|----------|
| PI | DE 3430310 | A1 | 19860227 | DE 1984-3430310 | 19840815 |
| | WO 8601204 | A1 | 19860227 | WO 1985-DE275 | 19850814 |
| | W: AU, DK, JP, US | | | | |
| | RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| | AU 8546777 | A1 | 19860307 | AU 1985-46777 | 19850814 |
| | AU 592765 | B2 | 19900125 | | |
| | EP 189473 | A1 | 19860806 | EP 1985-904092 | 19850814 |
| | EP 189473 | B1 | 19920527 | | |
| | R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| | JP 62500168 | T2 | 19870122 | JP 1985-503646 | 19850814 |
| | AT 76639 | E | 19920615 | AT 1985-904092 | 19850814 |
| | DK 8601687 | A | 19860414 | DK 1986-1687 | 19860414 |
| | US 4958026 | A | 19900918 | US 1986-867365 | 19860530 |
| PRAI | DE 1984-3430310 | | 19840815 | | |
| | DE 1985-3525563 | | 19850715 | | |
| | EP 1985-904092 | | 19850814 | | |
| | WO 1985-DE275 | | 19850814 | | |

GI



AB Dopamine derivs. R1R2NCH2CH2A (A = 3,4-XYC6H3, Q, Q1; R1, R2 = H, alkyl, allyl; X = OH, NH2, NHCOR3, NHCONH2, NHSO2CF3, when Y = OH; Y = OH, NH2, NHCOR3, NHCONH2, NHSO2CF3, NHSO2Me, when X = OH; X .noteq. Y = OH; R3 = alkyl; Z = H, OH, when Z = OH, A can be in tautomeric form), useful as antihypertensives, were prepd. For example, formamide I was prepd. in 8 steps from 4,3-HO(O2N)C6H3CHO. At 10 mg/kg in rats, I decreased blood pressure 22% max.

ST antihypertensive dopamine deriv prepn; formamidophenethylamine antihypertensive prepn

IT Antihypertensives (dopamine derivs.)

IT 141-75-3 358-23-6
RL: RCT (Reactant); RACT (Reactant or reagent) (acylation by, of aminophenethylamine deriv.)

IT 100-44-7, reactions
RL: RCT (Reactant); RACT (Reactant or reagent) (benzylation by, of hydroxynitrobenzaldehyde)

IT 700-38-9 3011-34-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(benzylation of)

IT 61873-94-7
RL: PROC (Process)
(conversion of, to acid chloride)

IT 104102-93-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and cyanation of)

IT 104083-40-1P 104083-42-3P 104083-45-6P 104083-64-9P 104103-28-8P
104103-31-3P 104103-34-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and debenylation of)

IT 104083-54-7P 104102-88-7P 104102-94-5P 104102-95-6P 104102-96-7P
104103-02-8P 104103-09-5P 104103-18-6P 104103-19-7P 104103-20-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and hydrogenation of)

IT 104103-26-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and hydrogenolysis of)

IT 104083-56-9P 104083-66-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and hydrolysis of)

IT 104083-48-9P 104083-57-0P 104083-68-3P 104083-89-8P 104083-90-1P
104083-91-2P 104102-98-9P 104102-99-0P 104103-01-7P 104103-03-9P
104103-04-0P 104103-07-3P 104103-10-8P 104103-11-9P 104103-12-0P
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and reaction of)

IT 104102-89-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and reaction of, with amine)

IT 104102-92-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and reaction of, with thionyl chloride)

IT 22955-07-3P 104083-58-1P 104083-61-6P 104083-63-8P 104102-90-1P
104103-00-6P 104103-05-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and redn. of)

IT 104102-91-2P 104102-97-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

IT 32550-92-8P 81666-88-8P 101566-34-1P 103544-40-7P 104083-39-8P
104083-41-2P 104083-43-4P 104083-44-5P 104083-46-7P
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104083-67-2P 104083-69-4P 104083-71-8P 104083-72-9P 104083-73-0P
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 104103-29-9P 104103-30-2P **104103-32-4P** 104103-33-5P
 104104-11-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as antihypertensive)

IT 51-61-6DP, derivs.

RL: PREP (Preparation)

(prepn. of, as antihypertensives)

IT 96886-48-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn., hydrogenolysis and acylation of)

IT 2950-43-8 5815-08-7 38512-82-2 81654-50-4 104083-70-7
 104103-06-2 104103-08-4

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of)

IT 104083-47-8 104083-54-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of,)

IT 100-46-9, reactions 124-02-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with indazoleacetic acid deriv.)

IT 142-84-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with phenylacetyl chloride deriv.)

IT 123-38-6, reactions

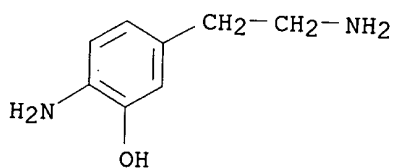
RL: RCT (Reactant); RACT (Reactant or reagent)
 (reductive amination of, with phenylethylamine deriv.)

IT **104083-43-4P 104083-75-2P 104083-77-4P**
104103-32-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of, as antihypertensive)

RN 104083-43-4 HCAPLUS

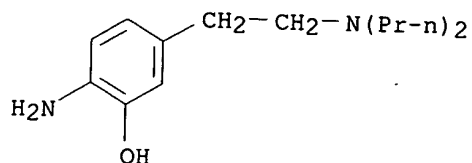
CN Phenol, 2-amino-5-(2-aminoethyl)-, hydrochloride (9CI) (CA INDEX NAME)



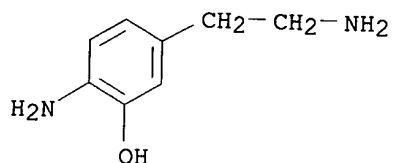
●x HCl

RN 104083-75-2 HCAPLUS

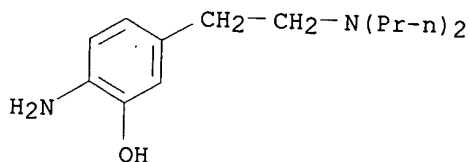
CN Phenol, 2-amino-5-[2-(dipropylamino)ethyl]- (9CI) (CA INDEX NAME)



RN 104083-77-4 HCAPLUS
CN Phenol, 2-amino-5-(2-aminoethyl)- (9CI) (CA INDEX NAME)

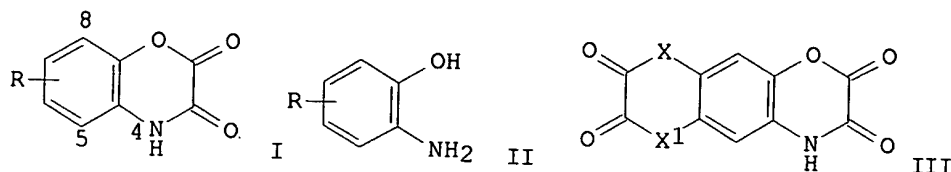


RN 104103-32-4 HCAPLUS
CN Phenol, 2-amino-5-[2-(dipropylamino)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)



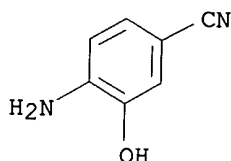
● 2 HCl

L13 ANSWER 36 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1985:62165 HCAPLUS
DN 102:62165
TI [1,4]Benzoxazine-2,3-diones as antiallergic agents
AU Loev, Bernard; Jones, Howard; Brown, Richard E.; Huang, Fu Chih;
Khandwala, Atul; Leibowitz, Mitchell J.; Sonnino-Goldman, Paula
CS Dep. Med. Chem., Revlon Health Care Group, Tuckahoe, NY, 10707, USA
SO Journal of Medicinal Chemistry (1985), 28(1), 24-7
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
CC 28-13 (Heterocyclic Compounds (More Than One Hetero Atom))
OS CASREACT 102:62165
GI

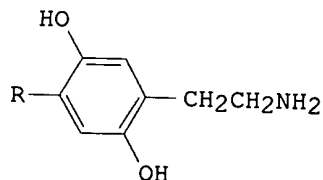


- AB Benzoxazinediones I [R=H, 6-Cl, 6-, 7-, 8-MeO, 7-OH, 6-CF₃, 4-, 7-Me, 6-NO₂, 7-CN, 6-CO₂Et, 7-CO₂H, 6-NHCOCO₂Et, 6,7-(MeO)₂, 6-CO₂Me-8-MeO, 8-MeO-6-CH₂CH:CH₂, 6,7-(CH₂)₄, 6,7-, 5,6-CH:CHCH:CH] were prepd. by cyclizing aminophenols II with (ClCO)₂. Benzobisoxazinetetrone III (X=O, X₁=NH; X=NH, X₁=O) were prepd. in 6 steps from 2,4-(MeO)₂C₆H₃NH₂ and in 5 steps from 2,5,4-(MeO)₂(O₂N)₂C₆H₂NH₂, resp. I and III were evaluated for their effect in the rat mast cell (RMC) test passively sensitized in vitro with rat antiovalbumin serum and for their effect in inhibitory passive cutaneous anaphylaxis (PCA) in the rat. Some of these compds. are of the same potency level as disodium cromoglycate in the RMC test and some are effective orally in PCA.
- ST allergy benzoxazinedione benzobisoxazinetetrone prepn; anaphylaxis
- IT Allergy
(benzoxazinediones and benzobisoxazinetetrone in treatment of)
- IT Anaphylaxis
(passive cutaneous, benzoxazinediones and benzobisoxazinetetrone effect on)
- IT 79-37-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with aminophenols)
- IT 95-55-6 95-85-2 99-57-0 454-81-9 2374-03-0 2834-92-6 2835-98-5
5417-63-0 7107-04-2 13052-92-1 13066-95-0 20734-76-3 28094-04-4
40925-70-0 40925-71-1 **55586-26-0** 92643-71-5 92643-72-6
92643-73-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with oxalyl chloride, benzoxazinedione deriv. by)
- IT 3597-63-5P 27383-80-8P 27393-19-7P 27393-20-0P 72985-52-5P
81055-21-2P 81055-22-3P 81055-23-4P 81055-25-6P 81055-27-8P
81055-28-9P 81055-29-0P 81055-30-3P 81055-31-4P 81055-32-5P
81066-48-0P 81066-49-1P 92643-66-8P 92643-67-9P 92643-68-0P
92643-69-1P 92643-70-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and antiallergic activity of)
- IT 92643-77-1P 92643-81-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and cyclization of, benzobisoxazinetetrone by)
- IT 92643-76-0P 92643-80-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and demethylation of)
- IT 92643-74-8P 92643-78-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and hydrogenation of)
- IT 24451-12-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. and nitration of)
 IT 92643-75-9 92643-79-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. N-acetylation of, by Et oxalyl chloride)
 IT 4755-77-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (N-acetylation by, of aniline derivs.)
 IT 2735-04-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (N-acetylation of, by Et oxalyl chloride)
 IT 55586-26-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization of, with oxalyl chloride, benzoxazinedione deriv. by)
 RN 55586-26-0 HCAPLUS
 CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 37 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1984:120754 HCAPLUS
 DN 100:120754
 TI Synthesis and physicochemical and neurotoxicity studies of
 1-(4-substituted-2,5-dihydroxyphenyl)-2-aminoethane analogs of
 6-hydroxydopamine
 AU Cheng, Alice C.; Castagnoli, Neal, Jr.
 CS Sch. Pharm., Univ. California, San Francisco, CA, 94143, USA
 SO Journal of Medicinal Chemistry (1984), 27(4), 513-20
 CODEN: JMCMAR; ISSN: 0022-2623
 DT Journal
 LA English
 CC 26-9 (Biomolecules and Their Synthetic Analogs)
 GI



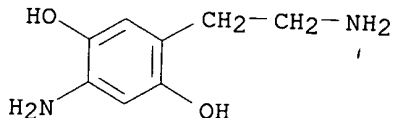
I

AB In an attempt to evaluate the possible relationship between the neurotoxicity of 6-hydroxydopamine and the redox properties and electrophilic reactivity of the 6-hydroxydopamine-p-hydroquinone/p-quinone

system, the 6-hydroxydopamine analogs I (R = H, Me, OMe, NO₂, NH₂, Br, cyano, CO₂H, Cl) were prepd. With the aid of cyclic voltammetry, the formal oxidn. potentials (E.degree.') for the p-hydroquinone/p-quinone redox couples and the rates of cyclization of the p-quinones to the corresponding p-iminoquinones were detd. As expected, electron-rich I were easily oxidized to the p-quinones, which underwent cyclization slowly, whereas the oxidn. of electron-poor I required higher voltages and yielded p-quinones, which cyclized readily at pH 7.4. In vivo destruction of nonadrenergic terminals, as measured by inhibition of norepinephrine uptake by rat heart slices, occurred only with I bearing electron-donating substituents. Potent neurotoxic properties were assocd. with I (R = NH₂, OH) which form p-quinones that do not cyclize readily at pH 7.4. These results support the thesis that the p-quinone deriv. may be an important species in the mediation of the neurodestruction caused by 6-hydroxydopamine.

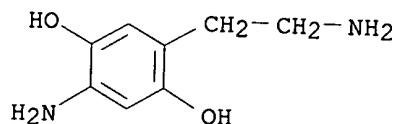
- ST hydroxydopamine substituent neurotoxicity prepn; oxidn electrochem hydroxydopamine
- IT Nerve, toxic chemical and physical damage
(from hydroxydopamine derivs.)
- IT Oxidation, electrochemical
(of hydroxydopamine derivs.)
- IT 66142-81-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(demethylation of)
- IT 1199-18-4
RL: PRP (Properties)
(neurotoxicity of, oxidn. in relation to)
- IT 88441-00-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deacetylation of)
- IT 88440-98-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deblocking of)
- IT 3600-86-0P 24333-19-5P 88441-02-5P 88441-07-0P 88441-11-6P
88441-14-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and demethylation of)
- IT 88441-16-1P 88453-16-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and hydrogenolysis of)
- IT 88440-96-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and oxidn. of)
- IT 88441-04-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with cyanide)
- IT 24160-51-8P 25505-64-0P 40276-11-7P 88440-97-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of)
- IT 15394-83-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
 (prepn. and tert-butoxycarbonylation of)
 IT 13062-74-3P 88440-94-2P 88440-95-3P 88440-99-7P **88441-01-4P**
 88441-03-6P 88441-06-9P 88441-08-1P 88441-10-5P 88441-13-8P
 88441-15-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 IT 21581-41-9P 38411-82-4P 41241-39-8P **41241-40-1P**
 81255-52-9P 81255-55-2P 88441-05-8P 88441-09-2P 88441-12-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn., oxidn., and neurotoxicity of)
 IT 75-52-5, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with dimethoxybenzaldehydes)
 IT 4925-88-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with nitrobenzene)
 IT 93-02-7 4460-86-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with nitromethane)
 IT **88441-01-4P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 88441-01-4 HCAPLUS
 CN 1,4-Benzenediol, 2-amino-5-(2-aminoethyl)-, monohydrochloride (9CI) (CA
 INDEX NAME)



● HCl

IT **41241-40-1P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (prepn., oxidn., and neurotoxicity of)
 RN 41241-40-1 HCAPLUS
 CN 1,4-Benzenediol, 2-amino-5-(2-aminoethyl)- (9CI) (CA INDEX NAME)



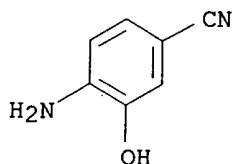
L13 ANSWER 38 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1975:444735 HCAPLUS
 DN 83:44735

KATHLEEN FULLER EIC 1700/PARKER LAW 308-4290

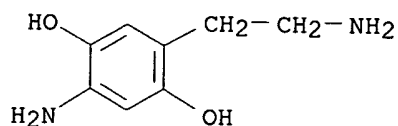
TI Bis-aroxazoly-p-polyphenylenes
 IN Fleck, Fritz; Kittl, Hans; Schmid, Horst
 PA Sandoz Ltd., Switz.
 SO Patentschrift (Switz.), 7 pp.
 CODEN: SWXXAS
 DT Patent
 LA German
 IC C07D; C08K
 CC 40-11 (Dyes, Fluorescent Whitening Agents, and Photosensitizers)
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|-------------|-------------|-----------------|-------------|
| PI | CH 559737 | A | 19750314 | CH 1971-14172 | 19710928 |
| PRAI | CH 1971-14172 | | 19710928 | | |
| GI | For diagram(s), see printed CA Issue. | | | | |
| AB | Fluorescent whiteners [I, R = H, Me ₃ C; R ₁ = H, CN; R ₂ = H, Me, CMe ₃ ; R ₃ = H; (RR ₁), (R ₂ R ₃) = benzo; n = 3,4] were prepd. and were used to whiten polyamide, polyester, or polypropylene fibers from the melt. Thus, a mixt. of p-terphenyl-4,4''-dicarbonyl chloride [50349-66-1] and 9-amino-10-hydroxyphenanthrene [55586-24-8] in PhCl in the presence of pyridine was heated at 130.degree. for 2 hr to give the diamide intermediate, the diamide was cyclized by heating at 240-50.degree. for 2 hr in dibutyl phthalate-diethylene glycol in the presence of H ₃ BO ₃ to give fluorescent whitener I [(RR ₁) = (R ₂ R ₃) = benzo, n = 3] [35325-04-3]. Five other I were similarly prepd. | | | | |
| ST | fluorescent brightener bisbenzoxazolyl; benzoxazole fluorescent brightener; terphenyl fluorescent brightener; quaterphenyl fluorescent brightener; polyamide fiber fluorescent brightener; polyester fiber fluorescent brightener; polypropylene fiber fluorescent brightener | | | | |
| IT | Fluorescent brighteners (bis(aroxazolyl)polyphenylenes, polyamide, polyester and polypropene fibers) | | | | |
| IT | Polyamide fibers Polyester fibers Polypropene fibers RL: USES (Uses) (fluorescent brighteners for, bis(aroxazolyl)polyphenylenes as) | | | | |
| IT | 37421-45-7P | 37421-46-8P | 37421-47-9P | 37421-48-0P | 37421-49-1P |
| | RL: PREP (Preparation) (fluorescent brighteners, manuf. of) | | | | |
| IT | 55586-25-9P RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (prepn. and cyclization of) | | | | |
| IT | 35325-04-3P RL: IMF (Industrial manufacture); PREP (Preparation) (prepn. and polyamide fiber fluorescent brightening by) | | | | |
| IT | 55586-27-1 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with aminohydroxyaryl derivs.) | | | | |
| IT | 50349-66-1 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with aminohydroxyphenanthrene) | | | | |
| IT | 95-84-1 | 1643-39-6 | 2834-92-6 | 55586-26-0 | |
| | RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with quaterphenyldicarbonyl chloride) | | | | |
| IT | 55586-24-8 RL: RCT (Reactant); RACT (Reactant or reagent) | | | | |

(reaction of, with terphenyldicarbonyl chloride)
 IT 55586-26-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with quaterphenyldicarbonyl chloride)
 RN 55586-26-0 HCAPLUS
 CN Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 39 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1973:438437 HCAPLUS
 DN 79:38437
 TI Selective destruction of adrenergic nerve terminals by chemical analogs of 6-hydroxydopamine
 AU Tranzer, J. P.; Thoenen, H.
 CS Dep. Exp. Med., F. Hoffmann-La Roche and Co. Ltd., Basel, Switz.
 SO Experientia (1973), 29(3), 314-15
 CODEN: EXPEAM; ISSN: 0014-4754
 DT Journal
 LA English
 CC 1-3 (Pharmacodynamics)
 AB The mechanism of adrenergic action in rats was studied by comparing the chem. structure of 6-hydroxydopamine analogs with their norepinephrine-depleting activities and their effects on adrenergic nerve structure. The redox potential of these compds. is apparently one of the essential factors detg. whether a chem. sympathectomy occurs or not.
 ST adrenergic dopamine analog; hydroxydopamine analog adrenergic
 IT Nerve
 (adrenergic, hydroxydopamine analogs effect on)
 IT Molecular structure-biological activity relationship
 (nerve terminal-degenerating, of hydroxydopamine analogs)
 IT 1199-18-4 4228-71-1 14901-09-8 21581-41-9 21581-49-7 38411-80-2
 41241-36-5 41241-39-8 41241-40-1 41241-41-2 41241-42-3
 41241-43-4 41241-45-6 41241-46-7 41241-47-8 41241-48-9
 41241-49-0 41241-50-3
 RL: BIOL (Biological study)
 (adrenergic nerve terminal degeneration and norepinephrine depletion by)
 IT 51-41-2
 RL: BIOL (Biological study)
 (hydroxydopamine analogs effect on)
 IT 41241-40-1
 RL: BIOL (Biological study)
 (adrenergic nerve terminal degeneration and norepinephrine depletion by)
 RN 41241-40-1 HCAPLUS
 CN 1,4-Benzenediol, 2-amino-5-(2-aminoethyl)- (9CI) (CA INDEX NAME)



L13 ANSWER 40 OF 40 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1925:18055 HCAPLUS
DN 19:18055
OREF 19:2339g-i,2340a-g
TI Formation of quinonimides and phenoxazones from o-aminophenols
AU v. Auwers, K.; Murbe, E.; Sauerwein, K.; Deines, G.; Schornstein, J.
SO Fortschritte der Chemie, Physik und physik. Chem. (1924), 18(No. 2), 37-77
DT Journal
LA Unavailable
CC 10 (Organic Chemistry)
AB 3,5-Me2C6H3OH (I) in AcOH and Cl give 66% of the p-Cl deriv. (II), m. 114-5.degree.; a concd. soln. in CCL4 gives a mixt. of mono- and di-Cl derivs. (32.2% Cl), m. 77.5-8.5.degree., whose Bz deriv., m. 113-4.degree.. Completely satg. I in AcOH with Cl gives 1,3-dimethyl-2,4,4,6-tetrachloro-2,6-cyclohexadien-5-one (or 1,3-dimethyl-2,2,4,6-tetrachloro-3,6-cyclohexadien-5-one), m. 106-7.degree., decompd. by warm NaOH. II and Me2SO4 give the Me ether, b14 117.degree., m. 22.5-3.5.degree., which, with AcCl and AlCl3 in CS2 gives the o-Ac deriv., m. 76-7.degree. (oxime, m. 134-5.degree.). Heated with AlCl3 at 140-50.degree., there results p-chloro-o-aceto-sym-m-xenol, m. 109.degree. (oxime, m. 138.5.degree.). The oxime, boiled with 1: 1 HCl, yields o-amino-p-chloro-sym-m-xenol (III), m. 148-9.degree., quickly turns yellow in the air. The o-NO2 deriv. of II, egg-yellow, m. 87-9.degree., also gives III on reduction. Oxidation of III in NaOH by O or by air in H2O2 soln. gives 3,5-dimethyl-2-amino-1,4-benzoquinone 4-[2,4-dimethyl-3-chloro-6-hydroxyphenyl]imide, brownish yellow prisms or ocher-yellow powder, m. 188-9.degree., sol. in EtOH-NaOH with a yellow-red color and is pptd. unchanged by H2O; diln. of the brownish H2SO4 soln. gives a pale green fluorescence. 2,6,4-Me2(HO)C6H2CH:- NOH with AcOH-AcONa, followed by sapon., gives p-cyano-sym-m-xenol, m. 174-5.degree., whose o-NO2 deriv., pale yellow, m. 136.5-7.5.degree.; reduction gives the o-NH2 deriv., m. 165.6.degree., which is unchanged by oxidizing agents. Hemimellitenol Me ether, b. 220.5.degree., AcCl and AlCl3 give o-acetohemimellitenol, m. 83.5-4.5.degree.; the oxime, m. 147.degree., with HCl gives o-aminohemimellitenol (IV), m. 164-5.degree., and traces of 2,4,5,6-tetramethylbenzoxazole, m. 70-1.degree.. o-Nitrohemimellitenol, yellow m. 96-8.degree.. Oxidation of IV did not give definite products. o-Aminoisopseudocumene, m. 157-8.degree., on oxidation with air gives 3,5,6-trimethyl-2-amino-1,4-benzoquinone 4-[2,4,5-trimethyl-6-hydroxyphenyl]imide, deep yellow, m. 177-8.degree.; HCl salt, red; H2SO4 gives a Bordeaux-red color. m-ClC6H4NH2 gives a mixt. of 5,2-Cl(O2N)C6H3OH (V) and 5-chloro-4-nitrophenol, pale yellow, m. 120-1.degree. (av. yields, 30-35 and 25-30%). Reduction of V with SnCl2 and HCl gives 5-chloro-2-aminophenol, m. 153-4.degree. (HCl salt, m. 226-7.degree. (decompn.); di-Bz deriv., m. 140.degree.). Oxidation with air gives 7-chloro-3-aminophenoxazine (VI), dark reddish violet, m. 288.degree.; Ac deriv., orange-yellow, m. 325.degree.. With 2-HOC6H4CHO there results 3-[2-hy-hydroxybenzylidene]amino-7-chlorophenoxazine, nearly black, with metallic luster, m. 310-1.degree.. VI and 5,2-Cl(H2N)C6H3OH.HCl give 2,6-dichlorotriphenldioxazine, wine-red,

sublimes above 360.degree., and gives a deep blue concd. H₂SO₄ soln. 5-Bromo-2-nitrophenol, m. 41.5-2,5.degree. (35-40% yields); the 4-nitro deriv., yellow, m. 129-30.degree.. 5-Bromo-2-aminophenol, pale rose, m. 146-7.degree.. 7-Bromo-3-aminophenoxazone, dark red, m. 285-6.degree.; 2,6-dibromotriphenyldioxazine, brown flakes, sublimes above 360.degree.; concd. H₂SO₄ soln., deep blue. 2-Aceto-3,5-dichlorophenol (VII), m. 49-50.degree. (35-40%); the 4-Ac deriv., m. 117-9.degree. (yield, 30%). Oxime of VII, m. 140-1.degree.; HCl gives 3,5-dichloro-2-aminophenol, m. 132-3.degree. (60% yield) and some 2-methyl-4,6-dichlorobenzoxazole, m. 50-1.degree.. 3-Amino-4,5,7-trichlorophenoxazone, brick-red, m. 286-7.degree.. 4-Aceto-3,5-dibromophenol, m. 141-2.degree.. 2-Ac deriv., m. 96-7.degree.; oxime, m. 139-40.degree.. 3,5-Dibromo-2-aminophenol, m. 142-3.degree.; the anhydro-base, 2-methyl-4,6-dibromobenzoxazole, m. 100-2.degree.. 3-Amino-4,5,7-tribromophenoxasone, wine-red, m. 305-6.degree.. 3-Hydroxy-4-nitrobenzaloxime, light yellow, m. 161.degree.. 5-Cyano-2-nitrophenol, brownish yellow, m. 121.degree.; Ac deriv., m. 107.degree.. 5-Cyano-2-aminophenol, light yellow, m. 149-50.degree.; di-Bz deriv., m. 165-6.degree.. Oxidation did not give characteristic compds. 5-Nitro-2-aminophenol benzoate, m. 266-7.degree.; oxidation of the free phenol gave indefinite products. 2-Methyl-5-chlorophenol, m. 73-4.degree.. 6-Nitro deriv., Au-yellow, m. 54.5-5.degree. (the p-deriv., m. 144-5.degree.); 6-amino deriv., m. 151.degree.; oxidation gave 1,8-dimethyl-4,5-dichloro-3-aminophenoxazone, blood-red, m. 308-9.degree.. 2-Methyl-3-chloro-6-aminophenol, m. 102.degree.; oxidation gave 1,8-dimethyl-7-chloro-3-amittophenoxazone, dark red, m. 278-9.degree.; Ac deriv., orange-red, m. 304-5.degree.. The structure of o-nitro-p-xyleneol, whose Bs deriv., m. 79-80.degree., follows from its reduction by SnCl₂: to 2-phenyl-4,7-dimethyl-bensoxazole, m. 75.degree.. o-Amino-p-xyleneol, m. 149-50.degree., N-Bz deriv., m. 210-1.degree.; dibenzoate, m. 178-9.degree.. 1,4,5,8-Tetramethyl-3-aminophenoxazone, dark bronze-red, m. 275-6.degree.; Ac deriv., bright red, m. 228-9.degree.. p-Bromo-o-nitro-p-xyleneol, m. 102-3.degree.; the o-amino deriv., m. 135.5-6.degree. (di-Bz deriv., m. 217-8.degree.); oxidation expts. gave indefinite results. o,o-Diamino-sym-m-xyleneol, m. 179-80.degree.; oxidation gave no definite results. 2,1-H₂NC₁₀H₆OH gave no definite product on oxidation; the crude product gave a "semicarbazone," C₂₁H₁₇O₂N₅, of indefinite m. p. Thus, in general, o-NH₂C₆H₄OH contg. in the m-position to the HO group a strongly negative group do not give oxidation products.

IT Quinonimines

(from o-aminophenols)

IT Phenols

(o-amino-, quinonimines and phenoxazones from)

IT 2,5-Benzoxylide, 3'-bromo-6'-hydroxy-, benzoate

2,5-Benzoxylide, 6'-hydroxy-

2,5-Benzoxylide, 6'-hydroxy-, benzoate

2,5-Xyleneol, 4-bromo-6-nitro-

2,5-Xyleneol, 6-amino-4-bromo-

2,5-Xyleneol, 6-nitro-, benzoate

2,5-Xyleneol, 6-nitro-, benzoate

2,6-Xylonitrile, 3-amino-4-hydroxy-

2,6-Xylonitrile, 4-hydroxy-

2,6-Xylonitrile, 4-hydroxy-3-nitro-

3,4,5-Hemimellitenol, 2-amino-

3,4,5-Hemimellitenol, 2-nitro-

3,5-Xyleneol, 2,6-diamino-

3,5-Xyleneol, 2-amino-4-chloro-

3,5-Xyleneol, 4-chloro-2-nitro-

3,5-p-Xyloquinonimine, 2-amino-N-(3-chloro-6-hydroxy-2,4-xylyl)-
 3-Isophenoxazone, 4-acetamido-2,5,7,10-tetramethyl-
 3-Isophenoxazone, 4-acetamido-9-chloro-
 3-Isophenoxazone, 4-acetamido-9-chloro-2,10-dimethyl-
 3-Isophenoxazone, 4-amino-2,5,7,10-tetramethyl-
 3-Isophenoxazone, 4-amino-5,7,9-tribromo-
 3-Isophenoxazone, 4-amino-5,7-dichloro-2,10-dimethyl-
 3-Isophenoxazone, 4-amino-5,7,9-trichloro-
 3-Isophenoxazone, 4-amino-9-bromo-
 3-Isophenoxazone, 4-amino-9-chloro-
 3-Isophenoxazone, 4-amino-9-chloro-2,10-dimethyl-
 3-Isophenoxazone, 9-chloro-4-salicylamino-
 Acetophenone, 2,4-dibromo-6-hydroxy-
 Acetophenone, 2,4-dibromo-6-hydroxy-, oxime
 Acetophenone, 2,4-dichloro-6-hydroxy-
 Acetophenone, 2,4-dichloro-6-hydroxy-, oxime
 Acetophenone, 2,6-dibromo-4-hydroxy-
 Acetophenone, 3-chloro-6-hydroxy-2,4-dimethyl-
 Acetophenone, 3-chloro-6-hydroxy-2,4-dimethyl-, oxime
 Acetophenone, 3-chloro-6-methoxy-2,4-dimethyl-
 Acetophenone, 3-chloro-6-methoxy-2,4-dimethyl-, oxime
 Acetophenone, 6-hydroxy-2,3,4-trimethyl-
 Acetophenone, 6-hydroxy-2,3,4-trimethyl-, oxime
 Benzanilide, 2'-hydroxy-4'-nitro-
 Benzanilide, 4'-chloro-2'-hydroxy-, benzoate
 Benzanilide, 4'-cyano-2'-hydroxy-, benzoate
 Benzanilide, o',o'''-dithiobis[N-methyl-
 Benzonitrile, 3-hydroxy-4-nitro-, acetate
 Benzoxazole, 3,5-dibromo-1-methyl-
 Benzoxazole, 3,5-dichloro-1-methyl-
 Benzoxazole, 3,6-dimethyl-1-phenyl-
 Isopseudocumenol, 6-amino-
 Quinonimine, 2-amino-N-(6-hydroxy-s-pseudocumyl)-3,5,6-trimethyl-
 Triphenodioxazine, 3,10-dibromo-
 Triphenodioxazine, 3,10-dichloro-
 o-3,5-Xylenone, 2,2,4,6-tetrachloro-
 o-Cresol, 5-chloro-4-nitro-
 o-Cresol, 5-chloro-6-nitro-
 o-Cresol, 6-amino-3-chloro-
 o-Cresol, 6-amino-5-chloro-
 p-3,5-Xylenone, 2,4,4,6-tetrachloro-
 Phenoxazones

IT

(from o-aminophenols)

IT

491-11-2, Phenol, 3-chloro-4-nitro- 5306-98-9, o-Cresol, 5-chloro-
 5470-65-5, Phenol, 3-bromo-4-nitro- 6981-15-3, Anisole,
 4-chloro-3,5-dimethyl- 17672-23-0, 2,5-Xylenol, 6-amino- 18495-15-3,
 Benzonitrile, 3-hydroxy-4-nitro- 27684-84-0, Phenol, 5-bromo-2-nitro-
 28443-50-7, Phenol, 2-amino-5-chloro- 38191-34-3, Phenol,
 2-amino-5-bromo- **55586-26-0**, Benzonitrile, 4-amino-3-hydroxy-
 56549-03-2, Phenol, 2-amino-5-chloro-, -HCl 56962-03-9, Phenol,
 2-amino-3,5-dichloro- 71608-10-1, 2,5-Xylenol, 6-nitro- 116496-11-8,
 Benzaldehyde, 3-hydroxy-4-nitro-, oxime 116632-17-8, Phenol,
 2-amino-3,5-dibromo-
 (prepn. of)

IT

55586-26-0, Benzonitrile, 4-amino-3-hydroxy-
 (prepn. of)

RN

55586-26-0 HCAPLUS

CN

Benzonitrile, 4-amino-3-hydroxy- (9CI) (CA INDEX NAME)

